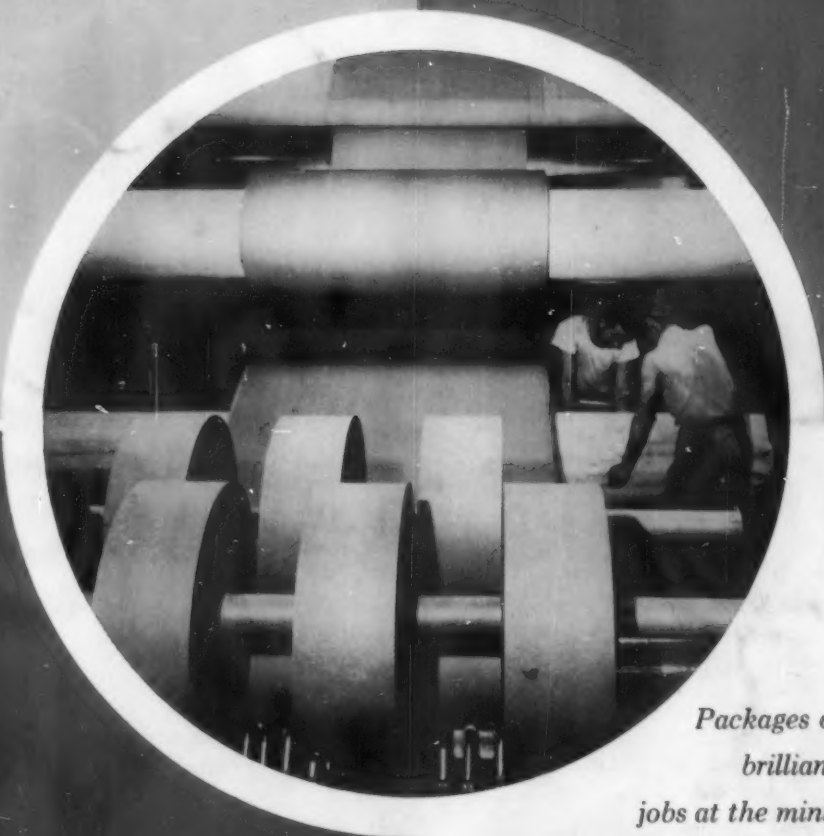


MODERN PACKAGING



JULY 1957

*Packages of paper perform
brilliant merchandising
jobs at the minimum of expense*

COMPLETE CONTENTS p. 2

9/11/57

do your envelope gums

**REACT TO
HUMIDITY?**



NEW CLIMATE GUMS

Take any day when envelopes are hard to make. Hot and humid. Dreary and wet. Desert dry. NEW CLIMATE GUMS are extraordinary! Why? Because they're weatherized for your own locale—against the extremes of temperature and humidity you actually face in gumming front seals, back seams and in making window envelopes.

NEW CLIMATE GUMS are tailor-made dextrines pre-adjusted to your climate conditions. The result? Faster, cleaner machining. Higher quality envelopes. Fewer production problems in any kind of weather, any season of the year. All reflecting the research, understanding and know-how of Healey-Seaver in combination with National Adhesives.

NEW CLIMATE GUMS cost no more. Require no special attention. Available liquid or dry. Why not discuss them further with one of National's Adhesive Specialists. Too, ask about our new low-cost resin dextrine formulations. Just write or call your nearest National office.



Executive Office: 270 Madison Avenue, New York 16

700 South Caton Avenue, Baltimore 29 • 735 Battery Street, San Francisco 11 • 3641 So. Washtenaw Avenue, Chicago 32

Tailor-made carton service by Gair



Gair's bright, white clay-coated board responds brilliantly to letterpress printing for Bayer. Bayer family identity is retained dynamically throughout a range of sizes.



Through the millions of packages Gair produces for Tide, colors remain constantly uniform, vivid, beautiful. Gair technique keeps Tide's bold product identity even when frequent coupon and copy changes are necessary.




Gair's uniquely constructed gift-package merchandiser for Mission-Pak Cheese! Economical folding boxboard, book-designed as a multiple package. Distinctively beautiful foil-laminated inner packs protect freshness and flavor.

Gair has a proven flair for creating cartons that sell. Gair Service is also a proven asset to satisfied customers everywhere. Discover how *your* product can be even more of a prize in a package by Gair—call your Gair representative or write Gair, today.



GAIR

creative engineering in packaging

BOXBOARD AND FOLDING CARTON DIVISION OF CONTINENTAL  CAN COMPANY
530 FIFTH AVENUE, NEW YORK 36, N. Y.



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JONES

new

thermo CARTONING

Actual on-the-line performance of the JONES CMTC (Constant Motion Thermo Cartoner) demonstrates its advantages.

Better Package

Protection superior to carton-plus-over-wrap. Guaranteed full tear-fiber seal, withstands -40° temperature, also plate and blast freezing; carton stock gives superior printing results. Patterned adhesive application—(1) uses 50% less adhesive; (2) no product contamination.

Lower Costs

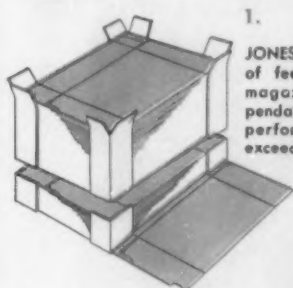
No overwrap—no wrapping machine—reduced material, floor space and labor costs; 1-piece package reduces handling and inventory; higher speed—conservative guarantee of 265 per minute on 5" pies, 160 per minute on TV Dinners or 8" pies—2 to 3 times the speed of available equipment now in operation.

Package and Load Control

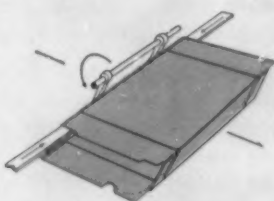
Continuous, positive, smooth control of package and load from carton magazine through refrigerated delivery.

Flexibility

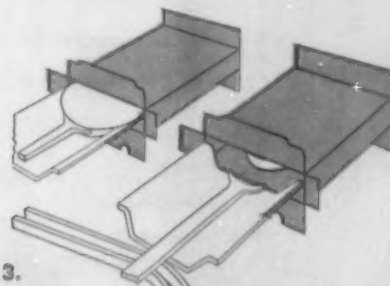
Handles loads from 4" to 8" pie size on one machine, other products in similar size proportions; simple change-over.



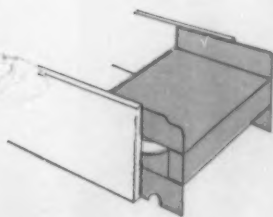
1. JONES standard method of feeding carton from magazine—proved dependable by years of performance at speeds exceeding 400 per minute.



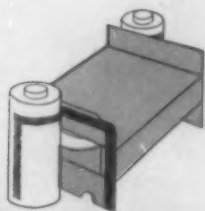
2. Cartons opened by double knife; fingers over-break carton past 90° angle to assure rectangular form.



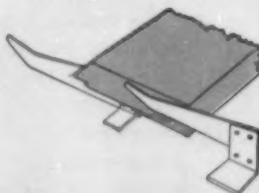
3. Carton held in true rectangular form by leading and trailing lugs while load is smoothly inserted from synchronized constant motion product conveyor.



4. Thermal dewaxing of sealing surface permits penetration of thermo-adhesive into carton fibers.



5. JONES intaglio thermo-applier provides clean, dependable, controlled application of thermo-adhesive on sealing surfaces only.



6. Closed flaps held in contact through refrigeration section—firmly setting the thermo-seal.

See JONES Cartoning Machines operating in production service; detailed specifications and operating data on JONES CMTC furnished promptly; address main office.

R. A. JONES & Co., Inc.

P. O. BOX 435,
CINCINNATI, OHIO

Cartoners — Case Packers — Soap Presses

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MODERN PACKAGING

The great design debate

There seems to be a great deal of soul-searching and self-analysis going on among the package-design fraternity. How is the packager going to come out: for better or for worse?

ITEM: Some 300 persons are corralled into what is described as the "First Annual" Packaging Research Conference at New York's Plaza Hotel (sponsored, at \$100 a head, by a design organization) to hear talk about mother and father complexes and other obscure "motivations" which would impress no one but the most starry-eyed Madison Ave. novitiates.

ITEM: A Chicago packaging show, sponsored by the Society of Typographic Arts, brings expressions of "some regret" by the judges at the lack of "real surprises." The judges decried "the penchant of designers for making a fashion out of interesting approaches, to an extent that makes them no longer interesting."

ITEM: Two art directors engage in a public debate in an advertising magazine. One argues that, in packaging, esthetics are unnecessarily sacrificed for competitive "vulgarity." The other replies that packaging's goal is sales, so "fine artistic components" must be subordinated to practical business requirements—without losing intrinsic design values.

ITEM: An advertising agency man—Ferd Ziegler, McCann-Erickson—rocks the Package Designers Council with: "The modern advertising agency is already in competition with the professional package designer and will eventually swallow him up unless he helps the agency with solid information." Reply by Norbert Jay: "We package designers have had to redesign too many packages which were loused up by agencies to worry much about being swallowed up by them."

There's no clear connection between these items, but we think they make up to a rather alarming pattern.

The package designer (collectively speaking) has run into a buyer's market and is grasping for sales ammunition. Sometimes this gets silly. What makes a package sell, so far as design is concerned, is still a matter of distinctive good looks, quality connotation, good copy, right size for selling and convenience in use. Any attempt to expand these basic principles into Freudian concepts is more than the practical packager, the consumer or the practical designer can stomach for long. Let's get back to earth.

The Editors



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Cartoners — Case Packers — Soap Presses



The successful introduction of a new drug product is vitally important to Abbott Laboratories. That is why Dobeckmun Durafilm was selected for their DAYALET[®]. Durafilm's moisture protection plus transparency delivers these potent new multivitamins to the medical profession in perfect condition.



Packages for performance...



Dobeckmun Durafilm offers special advantages in the precision with which it can be engineered for each product's needs and in its outstanding performance on packaging machinery.

For small hardware, industrial and electrical parts Durafilm provides instant identification, durable toughness, protection from rust and corrosion.

For foods and liquids... for countless drug products, this lamination or extrusion of plastic films ensures meticulous protection and extra selling power.

It is moisture proof, heat sealing and of sparkling transparency and can be vividly printed to carry your brand name and sales message direct to consumers.



The Dobeckmun Company,

Cleveland 1, Ohio • Berkeley 10, California
Offices in most principal cities

Harcord packs a purpose



ATTRACTIVE OVAL PACKAGE is easy to shake . . . easy to fill. Pouring spout snaps in *after* filling . . . with no special equipment, and no seaming required. Unique gripping edge on metal cap makes for easy opening even with wet hands.



FULL STRENGTH STRING OPENER® . . . The outer plies of board in this unique canister, which can be made in round, square or oblong shapes, are not cut or scored during manufacture. This provides full-strength, fully sealed protection until customer pulls string opening device to cut through package. *Patent Pending



CARAC DUST GUN shoots to kill! HARCORD sealed, tamper-proof package works with easy, action-perfect sliding motion . . . effectively directs spray up or down. HARCORD packages like this give customer satisfaction at a cost of pennies.



TWO-WAY PACKAGE that's up on top is Permatex Cooling System Cleaner and Conditioner. A functional, partitioned HARCORD canister which opens on both ends, holds both products . . . provides long-lasting shelf life at reasonable cost.

you sell it better, you say it best in Paper Canisters by

HARCORD

HARCORD MANUFACTURING CO., INC.
125 Monitor St., Dept. MP-7, Jersey City 4, N. J.
New York Telephone: BARclay 7-5685



GER-PAK[®] POLYETHYLENE FILM

SHEETING AND TUBING FOR PROTECTIVE
PACKAGING AND DISPLAY PURPOSES

READILY PRINTABLE

Ger-Pak is ideal for packaging anything from clothing to groceries for protection and display purposes.

Ger-Pak's specially treated, printable, non-ruboff surface is non-toxic, heat sealable and stable to temperature and humidity changes.

CUT COSTS WITH GER-PAK DRUM AND CARTON LINERS

Use light-weight drums and cartons with Ger-Pak liners to seal out moisture, dirt, contamination—and cut costs as well. This tough, chemically inert film guarantees product protection—speeds return of shipping containers.

Ger-Pak Lay-flat Tubing is produced in a range of thicknesses, lengths and widths to complement your requirements. We welcome your inquiries.



GER-PAK

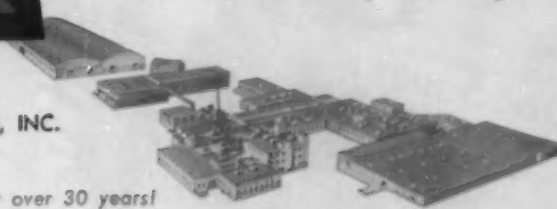
POLYETHYLENE FILM

GERING PRODUCTS, INC.

KENILWORTH, N. J.

Service • Quality • Dependability

Pioneers in modern plastics for over 30 years!



Betty Crocker has a reason...

The reason starts with the product, with delicate flavors to be locked in and guarded...carefully blended oils that must not seep through...exact moisture content that must be maintained. But *protected by Riegel* means much more...a complete, *engineered* system of packaging:

Product protection *always*, plus...

Paper tailored to run at high speed on automatic machines.

Paper made to your own specifications...plain, laminated, waxed, poly-coated, printed.

Paper that is made right, that will run right, that is priced right.

Hundreds of today's best-sellers benefit from Riegel's uniformly effective system of product protection. You can, too.

Write Riegel Paper Corporation, 260 Madison Avenue, New York 16.

Riegel

PROTECTIVE PACKAGING PAPERS



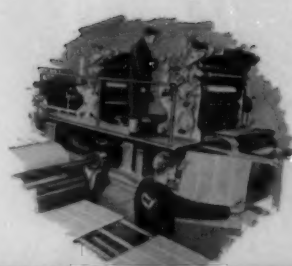
New Betty Crocker Macaroon Mix uses special Riegel waxed glassine to keep the product fresh and flavorful. Packaged at high speed on Pneumatic Scale equipment.



PRODUCT RESEARCH



ENGINEERING



LITHOGRAPHY



CLOSING MACHINERY

**NATIONAL
CAN**

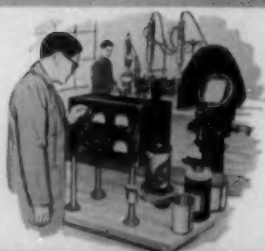
*Personal
Service*



SALES SERVICE



DESIGN



RESEARCH DEVELOPMENT

Combine a keen and personal interest in your products
and your processes with our sincere desire to be of help . . . and
you have NATIONAL CAN'S — "Personal Service!"
Why not let us survey your needs — you'll
see how much more you get from NATIONAL CAN.



NATIONAL CAN
C O R P O R A T I O N

CHICAGO • NEW YORK • SAN FRANCISCO . . . PLANTS FROM COAST TO COAST



Every inch a functional package

Here's a package that's good to look at . . . and even better to use.

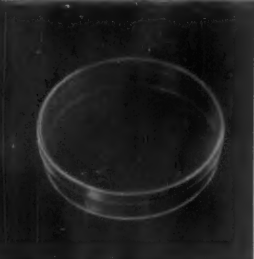
The wide pouring mouth was designed with syrup in mind, and the trim middle nestles firmly in the customer's hand as he pours. The benefits

for the packer are clear: a shoulder to keep label scuff-free, easy roll-on labeling, brand identity in the glass base, large appearance on the shelf.

Armstrong designers will have ideas for *your* new package. Armstrong Cork Co., Lancaster, Pa.

Armstrong PACKAGING

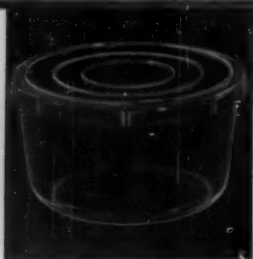
WATCH ARMSTRONG CIRCLE THEATRE EVERY OTHER TUESDAY EVENING ON NBC-TV



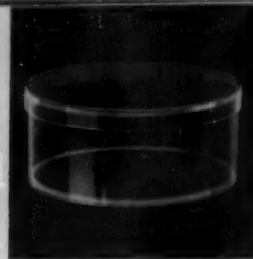
No. 32 diam: 2 $\frac{3}{4}$ " x $\frac{5}{8}$ " deep



No. 10 diam: 3 $\frac{1}{4}$ " x 1 $\frac{1}{4}$ " deep



No. 12 diam: 3 $\frac{3}{4}$ " x 2 $\frac{1}{2}$ " deep
(Plastic Snap-on Cover)

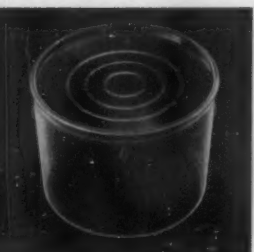


No. 15 diam: 3 $\frac{1}{4}$ " x 1 $\frac{1}{4}$ " deep



No. 210 diam: 3 $\frac{1}{4}$ " x 1 $\frac{1}{4}$ " deep
No. 211 (with Polyethylene Lid)

looking for a box that's round?



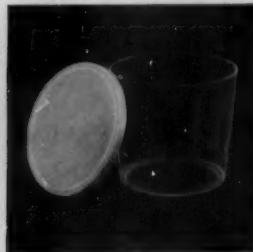
No. 42F diam: 3 $\frac{1}{4}$ " x 2 $\frac{1}{2}$ " deep
No. 21F diam: 3 $\frac{1}{4}$ " x 1 $\frac{1}{4}$ " deep



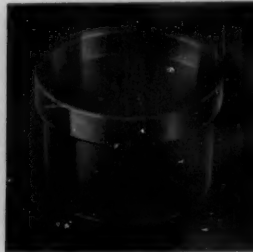
No. 415 diam: 3 $\frac{3}{4}$ " x 3 $\frac{3}{4}$ " deep
(Rigid translucent with clear lid)



No. 420 diam: 3 $\frac{1}{4}$ " x 2 $\frac{1}{4}$ " deep
No. 421 (with Polyethylene Lid)

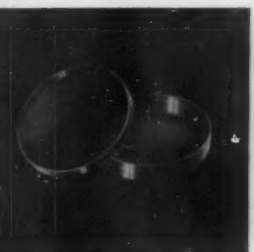


No. 425 diam: 3 $\frac{3}{4}$ " x 3 $\frac{3}{4}$ " deep
(Polyethylene Lid only)

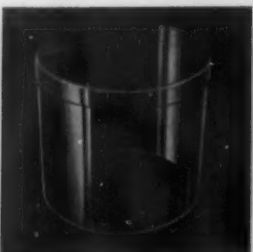


No. 72 diam: 3 $\frac{3}{4}$ " x 2 $\frac{1}{4}$ " deep

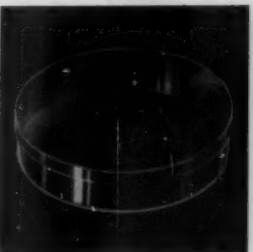
TRI-STATE is your source for



No. 52 diam: 4 $\frac{1}{4}$ " x $\frac{1}{4}$ " deep



No. 190 diam: 5 $\frac{1}{4}$ " x 5 $\frac{1}{4}$ " deep



No. 56 diam: 4 $\frac{1}{4}$ " x $\frac{3}{4}$ " deep



No. 170 diam: 6" x 1" deep

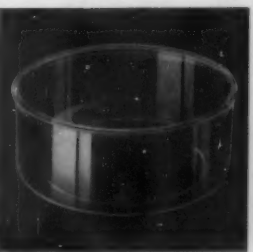


No. 175 diam: 6" x 1 $\frac{1}{4}$ " deep

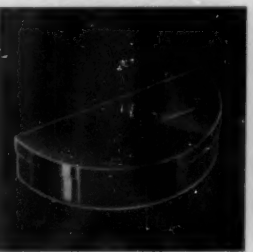
the world's largest assortment of



No. 180 diam: 6" x 2 $\frac{1}{2}$ " deep



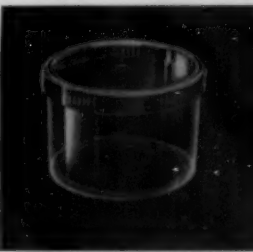
No. 240 diam: 8" x 3" deep
No. 250 diam: 10" x 3 $\frac{1}{4}$ " deep



No. 24 2 $\frac{1}{4}$ " x 4 $\frac{1}{4}$ " x $\frac{1}{4}$ " deep
No. 54 2 $\frac{1}{4}$ " x 4 $\frac{1}{4}$ " x $\frac{3}{4}$ " deep



No. 84 2 $\frac{1}{4}$ " x 4 $\frac{1}{4}$ " x 1 $\frac{1}{4}$ " deep

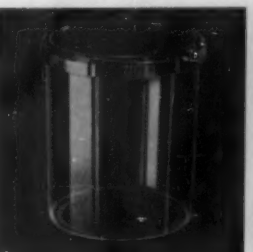


No. C40 diam: 3 $\frac{3}{4}$ " x 2 $\frac{1}{4}$ " deep

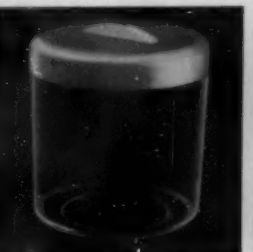
Rigid Plastic Boxes...all shapes and sizes



No. C50 diam: 3 $\frac{1}{4}$ " x 5 $\frac{1}{4}$ " deep



No. C70 diam: 4 $\frac{1}{4}$ " x 5 $\frac{1}{4}$ " deep



No. C189 diam: 7 $\frac{1}{4}$ " x 7 $\frac{1}{4}$ " deep



No. 09 diam: 3 $\frac{1}{4}$ " x 3 $\frac{1}{4}$ " deep



No. G2 1 $\frac{1}{4}$ " x 1 $\frac{1}{4}$ " deep

TRI-STATE PLASTIC MOLDING CO HENDERSON C KY.



REYNOLDS WRAP ALUMINUM PACKAGING

SweetHeart woos the shopper with richly gleaming color and romantic design... wins her reaching hand with dramatic beauty! But important, too,

is the way Reynolds Wrap Aluminum Packaging protects SweetHeart quality.

The wrapper says "sweet, mild." And that same wrapper bars the light rays that can affect color and "sweetness." That beautiful foil is the reason why SweetHeart retains all of its delicate fragrance...why it always feels fresh to the touch.

Add all this to SweetHeart's alluring looks, and you have lasting attachment! Take to your heart this lesson in wooing customers...at least by the beauty of Reynolds Wrap Aluminum Packaging...at most by beauty plus quality protection.

Call the nearest Reynolds sales office or write to **Reynolds Metals Company**, General Sales Office, Louisville 1, Kentucky.

More and More, an Important Selling Tool!

The Reynolds Wrap Aluminum Packaging Seal is used on more and more products, representing ever more millions of customer

impressions. And full-color magazine advertising, weekly network TV and spectacular displays add more power to this selling tool!



REYNOLDS ALUMINUM

See "Circus Boy", Sundays, NBC-TV. Watch for Reynolds on "Disneyland", ABC-TV Network.



Sweet Heart

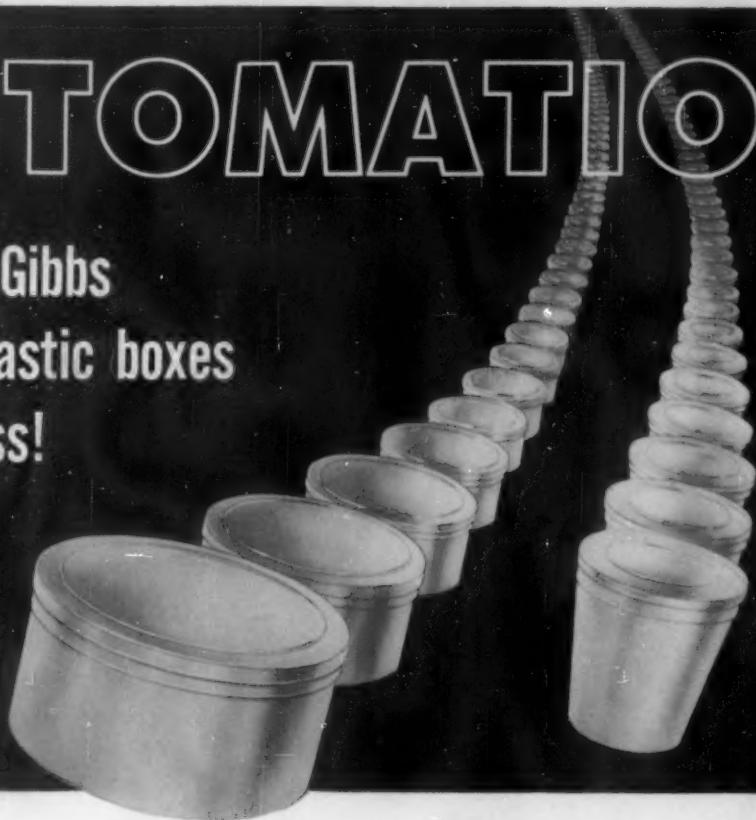
BATH SIZE

This notable example
of REYNOLDS WRAP
ALUMINUM PACKAGING is
here reproduced on the
only material that can
realize its gleaming
beauty: Reynolds
Aluminum
Foil.

Package designed by
A. H. S. Design Associates
Los Angeles, Cal. for P. W. &
S. W. Co.,
San Francisco,
California

AUTOMATION

makes Gibbs
rigid plastic boxes
cost less!



It's simple arithmetic! 100% automation accelerates production, cuts overhead, brings prices down to the level of many, not just the few. 100% automation means other advantages too. **A better container:** diamond brilliance that enhances your product, snug lids that really protect. **An efficient container:** nesting cuts shipping costs, warehousing, makes automatic filling and capping a cinch. **Prompt delivery:** America's most modern injection molding plant speeds that order to your filling line in less time. The six Gibbs containers shown here, available in clear and colored polystyrene, with polystyrene or polyethylene lids, enable many more products to afford the promotional and protective benefits of rigid plastic boxes. Imprinting available, up to 3 colors, on lids or sides of containers.



For samples, quick service, quality boxes, low quotes, call or write:

GIBBS AUTOMATIC MOULDING CORP.

Henderson 3, Kentucky Valley 6-9573

Chicago: 500 N. Dearborn St. St. Louis: 4030 Chouteau Ave.

*Polyethylene lids only

"The packaging decisions . . . most beautifully
timed . . . are those made because
someone has looked ahead."

Your packaging committee:



the pay-off is in timing

Too many packaging groups meet only to consider a sales or production problem already upon them.

They react quickly to a shift in sales standings, the spur of a competitor's new packaging, a sudden increase in breakage or spoilage, or some similarly specific problem.

Top management may consider even more important another committee function: anticipating packaging opportunities which can give your company a further competitive edge.

Get the jump

The packaging decisions which are most beautifully timed for sales results are those taken because someone has looked ahead.

How long, for example, has it been since you have looked at your package design... for visibility, identification, sales appeal? Have you considered the package modernization appropriate to new uses, new markets, new outlets for your product? Have you actively investigated smaller "convenience" units — or larger "family" sizes? How about multiple-unit packages? Or containers with new consumer-utility features?

These are some of the ways in which your packaging committee can make major contributions to profits.

Keep open-minded

When a packaging salesman comes up with a good creative idea, perhaps it can be worth more to you than to him. Give him the opportunity to present his case to your committee.

In reverse, when you are looking for a good answer to a given packaging problem, don't hesitate to ask your supplier to sit in. His broad experience may provide the necessary solution without extensive trial-and-error research on your part.

Lassiter has had the privilege of working at management levels with many distinguished companies. Our Package Evaluator may help you to see your package as your customer sees it... we'll send it on request.

LASSITER 
CORPORATION
350 FIFTH AVENUE • NEW YORK 1, N.Y.

EXECUTIVE OFFICES, Charlotte, N. C.

DIVISIONS: Atlanta, Ga. • Chicago, Ill. • Cheltenham, Pa. • Greensboro, N. C. • Danville, Va.

Designers and Manufacturers of Packaging in:

Cellophane • Polyethylene • Acetate • Paperboard
Mylar • Foil • Laminations • Vitafilm • Paper

Persuasive Packaging

Corn popping, Superman style



"Superman" is available as a brand name for various packaged products through Lassiter on an exclusive-franchise basis. And one of the new products popping into supermarkets as a result is this package of popping corn, marketed by Superman Popcorn, Carmi, Ill.

Father has his day



Sears, Roebuck and Company, to give Dad his due, packaged three pairs of Pilgrim brand men's socks in a paperboard folder for a special Father's Day promotion. The gift folder, die-cut to show the sock packages, featured a "Gay Nineties" design. The folder and the individual cellophane packages inside were Lassiter-designed and manufactured.

Towels get "Touch Test"



Shoppers can now check texture as well as design when buying packaged dish towels made by Angus Mills of Vass, N. C. Sparkling-clear polyethylene lets colors show through, while a special opening at the back of this Lassiter package permits feeling the cloth.



DYNAMIC

DYNASET

today's top performing offset ink!

Lithographers everywhere have found that performance-proven **DYNASET** gives them top quality work every time. Developed at the famous S&V laboratories, **DYNASET** is the result of a new, highly improved vehicle combination which always insures you of a sharp, clean working ink. Here is a high-strength offset ink that prints with maximum surface retention giving you outstanding half-tone reproduction. It dries fast but will not cake or dry on the rollers. And press-ready **DYNASET** won't change consistency—no matter how long your run. For uniform excellence and brilliant color, your best bet is . . . **DYNASET!**

Sinclair and Valentine Co.

611 WEST 129th STREET, NEW YORK 27, N. Y.

OVER 45 PLANTS PROVIDE STRATEGIC SERVICE



**UNDER VITAFILM—
Color and Texture** you can

**SEE
and FEEL!**

(Doesn't attract dust either—only customers!)

Mrs. K. *knows* what she wants when she shops for fabric. In store after store she pawed and clawed her way through bolt after bolt of rolled goods—ripping away wrappers, tearing her way through yard after yard while the salesladies cringed.

The result? No sale, and a lot of merchandise left to soil and spoil on the shelf.

BUT NOW Mrs. K. is an *OK* gal—she met her match in VITAFILM. You see this Goodyear film is tough and clear—lets customers *feel* the texture, *see* the true color of the

merchandise right through the wrap!

MORAL: Wise fabric and ready-to-wear folk are beating the wrap of tough customers by wrapping their goods in VITAFILM or using any of a wide variety of VITAFILM bags or trayed overwraps—great contact clarity, machinability, transmits texture and color in a soft, flattering way.

BETTER CHECK INTO IT: Call in a Goodyear Packaging Engineer for the full story of all the big benefits of VITAFILM. Write or call, Goodyear, Packaging Films Dept. G-6418, Akron 16, Ohio.

P. S. The price? Best news of all!

Vitafilm

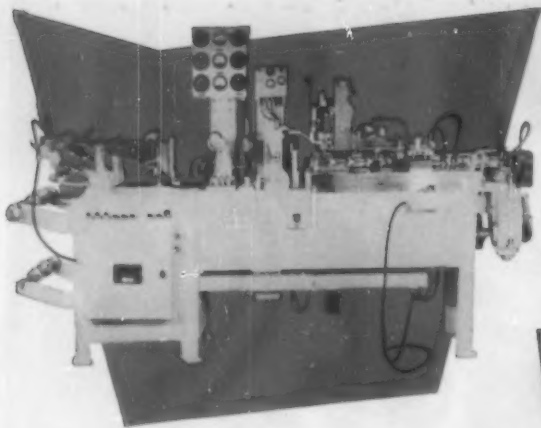
a new



The Finest In Sheer Protection

The Greatest Thing Between You and Your Customer!

Vitafilm, a Polyvinyl chloride—T.M.
The Goodyear Tire & Rubber Company, Akron, Ohio

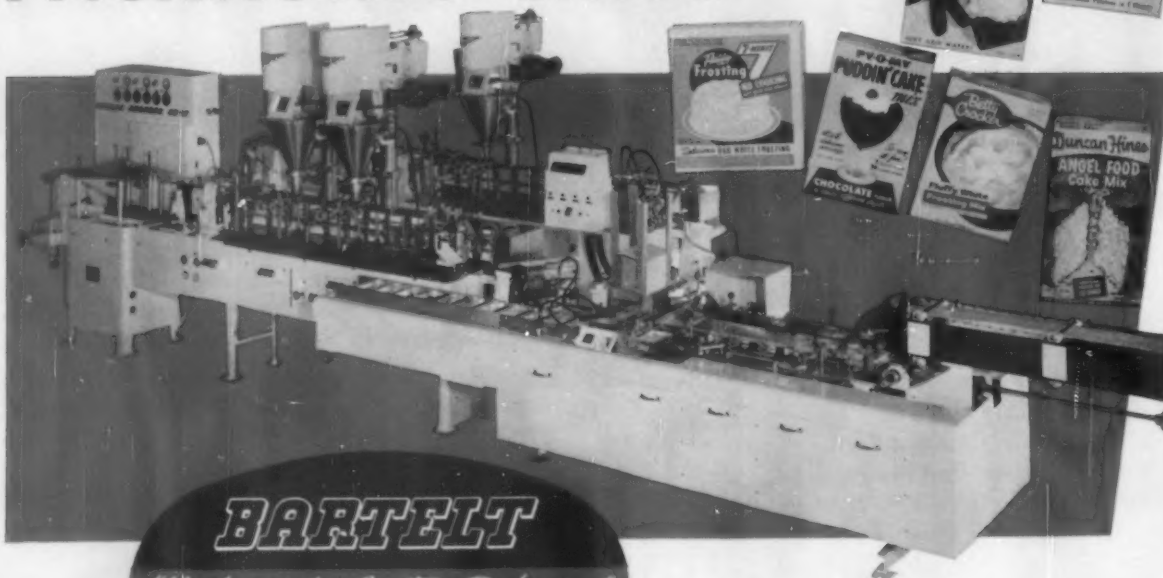


FROM LOW COST HIGH SPEED MACHINES

Now, you can have a fast, efficient packaging line with built-in versatility to meet changing market requirements. The Bartelt machine can produce a variety of sizes and combinations of packages such as those shown on the right. Pouches can be made from whatever heat sealable materials your product requires. Cartons can be filled with the desired number of pouches and with premium items. Write for new literature describing these latest advancements in automatic packaging.



TO COMPLETE PACKAGING LINES



BARTELT

Machinery for Creative Packaging

BARTELT ENGINEERING CO., ROCKFORD, ILL.

New York Office, 370 Lexington Ave.

There must be a reason...



Cellu-Craft makes the packages for America's Best Selling Brands

Because Cellu-Craft transparent, flexible packages are *sales-creating* packages... they spark impulse sales... build consumer recognition and *demand!* Design-engineered to solve your *merchandising-sales-packaging*

problems.... fit your production needs.

You're in the best company when you put Cellu-Craft package development engineers to work for your firm... your products... and watch sales grow.

CELLU-CRAFT

PRODUCTS CORPORATION

Designers, Converters and Color Printers of Flexible Packaging Materials

General Offices & Plant: 1401 4th AVE., NEW HYDE PARK, N.Y., PRIMROSE 5-8000 Sales Offices in principal cities.
PRINTED CELLOPHANE • POLYETHYLENE • PLIOFILM • FOIL • ACETATE • IN ROLLS • BAGS • POUCHES • ENVELOPES • SHEETS



FOR SHIPMENT
and **storage**



**KRAFTSMAN
LINER**

Both KRAFTSMAN LINER and KRAFTSMAN SUPER-LINER make strong, rigid corrugated containers for shipment and general handling. With each, strict quality control assures runability at any speed for fast, trouble-free conversion and lamination. Each, however, has its special use.

KRAFTSMAN LINER is a Westvaco-quality Four-drainer linerboard with a natural kraft color and smooth, even-textured surface offering excellent printability and printed appearance. Tough, too, it meets every requirement of standard corrugated containers.

WEST VIRGINIA PULP AND

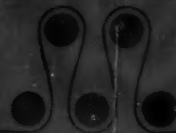
KRAFTSMAN LINER • KRAFTSMAN SUPERLINER • KRAFTSMAN WHITELINER



FOR SHIPMENT
and **display**

KRAFTSMAN SUPERLINER (formerly known as ISL) offers such plus values as extra brightness and extra smoothness at no extra cost. This unbleached kraft linerboard provides unique printing detail and contrast. SUPERLINER is ideal for displays or cartons where greater attractiveness and legibility are essential.

These are two members of the Westvaco KRAFTSMAN family—the *complete* line of containerboard for every conversion use. All have the same superior quality and controlled uniformity. For more information, call your KRAFTSMAN representative today.



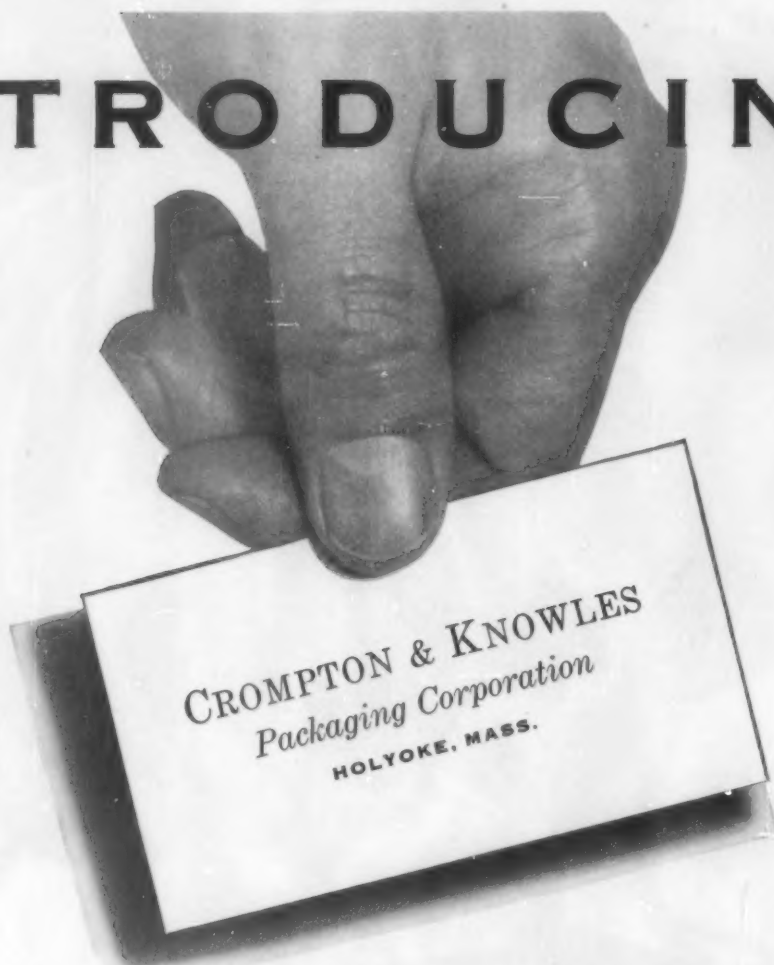
**KRAFTSMAN
SUPERLINER**



PAPER COMPANY • 230 Park Avenue, New York 17, N. Y.

• KRAFTSMAN DURA-CORR • KRAFTSMAN WEATHER-TITE DURA-CORR

INTRODUCING



A single sales, service and manufacturing organization

Combining

WRAP-KING overwrapping machines

RUSSELL can handling equipment

KLEAR-PLASTIC rigid plastic containers and manufacturing machinery

The new Crompton & Knowles Packaging Corporation offers you the products and services as well as engineering, research and development facilities of three leading packaging industry names PLUS the production capacity and machine building experience of Crompton & Knowles, one of the nation's oldest and largest machinery manufacturers.

This new organization offers you national sales and service together with new and improved products for your packaging operations. Crompton & Knowles Packaging Corporation products can help you get greater production and maximum versatility at lowest possible costs. We invite your inquiry.

Products Now Available

WRAP-KING — versatile overwrapping machines for individual and bundled products — for all types of film.

RUSSELL — can handling equipment . . . case packers (filled and empty) . . . gluers and compression units . . . case openers and positioners . . . tray positioners and packers.

KLEAR-PLASTIC — rigid plastic containers, trays and lids.



SALES REPRESENTATIVES

ATLANTA • BALTIMORE
BOSTON • CHICAGO
CLEVELAND • DENVER
LOS ANGELES • NEW YORK
PHILADELPHIA • ST. LOUIS
SAN FRANCISCO • TORONTO



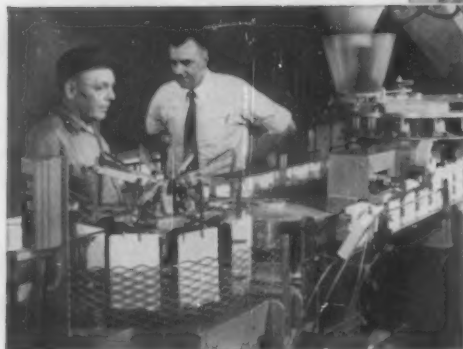
She'll like your product more in a Canco fibre container!

These are only a few of the many fibre containers Canco offers, each "special" in one or more ways—in convenience, in appearance, in durability. And *all* have shown their ability to gain special favor in the market place!

Canco, of course, has long been a leader in fibre packaging and has contributed many of the basic developments in this field. As a result, Canco's modern line is outstanding in both quality and value. Ask your Canco representative to show you samples!

• Watch NBC NEWS on TV presented alternate Mondays by Canco. See your local paper for time and channel.

CANCO American Can Company New York • Chicago • San Francisco



At the packaging point. The Man from Marathon can recommend the right combination of cartons and machines for efficient in-plant packaging.



At the point of no return. For packages that must "work" as well as protect and sell foods—see the Man from Marathon.



At the point of purchase. The Man from Marathon knows from personal, recorded interviews with shoppers and from point-of-purchase candid camera studies what customers look and reach for.

at his Fingertips . . .

the Man from Marathon has more information to help sell packaged foods

GOT A MERCHANDISING PROBLEM? The Man from Marathon can help you with it. Have him show you our candid camera studies of shoppers "in action" in food stores *everywhere*. See for yourself how people buy FROZEN FOODS, BAKED FOODS, MEAT and DAIRY PRODUCTS.

NEED SPECIAL PACKAGING? The Man from Marathon works with all types of packaging materials . . . can help you choose those best suited to your needs.

WANT TO SPEED PACKAGING LINE OPERATIONS? The Man from Marathon

speaks from personal, practical experience gained at production lines all over the country.

Marathon research—both "at home" and "in the field"—as well as Marathon printing, engraving and package design can help you sell *more* packaged foods, *more profitably*.

See the Man from Marathon for the complete story. Or write: Marathon Corporation, Dept. 201, Menasha, Wisconsin. In Canada: Marathon Packages Limited, Toronto.

MARATHON PACKAGES

SELL BRANDS • PROTECT PRODUCTS • SPEED PRODUCTION



**New sales appeal
for products
in polyethylene
utility boxes**

Colorful boxes molded of Tenite Polyethylene help manufacturers present products in attractive individual cases. Catching the customer's eye, they also help sell him with their promise of all-round utility.

These boxes are economical to produce, too, for they come from the molding machine completely finished. Top, bottom, hinges and clasp are molded in one piece of Tenite Polyethylene. If desired, tradenames and designs can be molded in or hot stamped.

Since the resilient plastic quickly recovers from crushing or other abuse, the boxes are practically unbreakable. And colors can't chip off—they go all the way through.

Packaging users are finding many jobs for Tenite Polyethylene: unbreakable bottles, boxes and jars...tough, clear or colored film...waterproof and heat-sealable coatings for paper, film and foil. For more information on the packaging usefulness of Tenite Polyethylene, write EASTMAN CHEMICAL PRODUCTS, INC., subsidiary of Eastman Kodak Company, KINGSFORD, TENNESSEE.

TENITE
POLYETHYLENE
an Eastman plastic

1932—EASTMAN'S 25TH YEAR IN PLASTICS—1957

Utility boxes molded of
Tenite Polyethylene by
Werner Manufacturing Co.,
Brookfield, Illinois.



Your Fine Product Demands Superior Packaging!

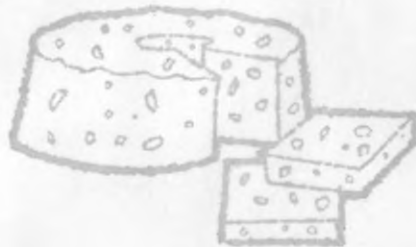
Pineapple, cherries, raisins, citrus peels, nuts, flour, spices, plus many other ingredients go into your choice fruit cakes. Aside from your delicious cakes, the way that it is displayed decides the way that it will sell. Why not let our many years of packaging experience help you?

Our complete art department and lithography experts are ready to serve your needs.

Whether it be custom designing or one of our many stock design tins, we're sure that they will do the job for you.

ROUND, SQUARE, OR OBLONG—WE HAVE THE RIGHT CONTAINER FOR YOUR PRODUCT.

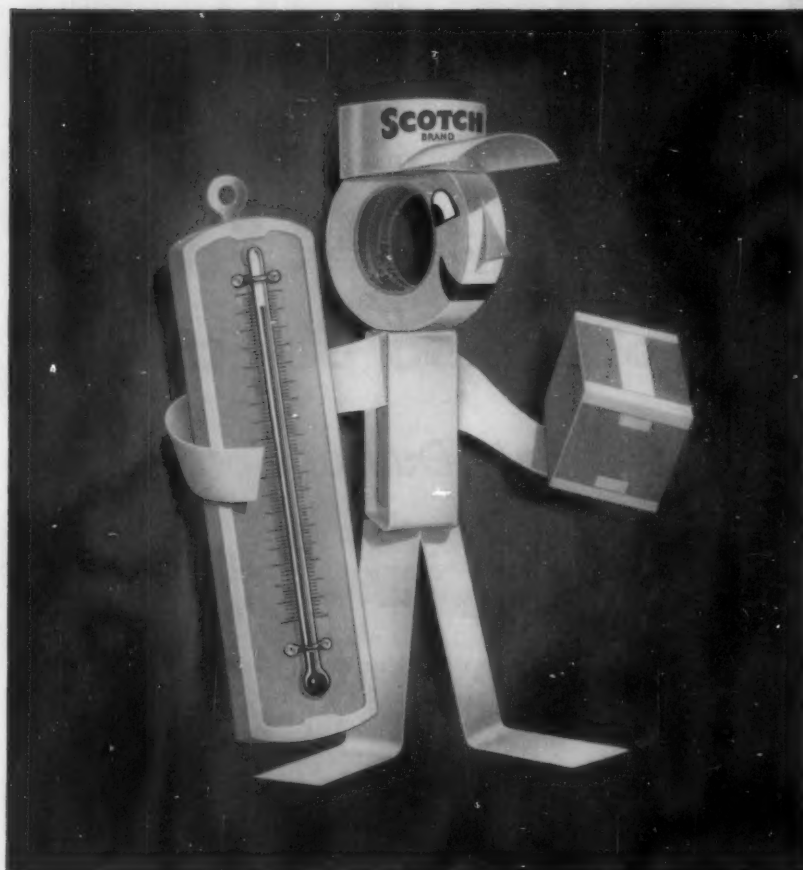
For information and quotation to your requirements, write or phone UNderhill 7-7474.



OLIVE CAN COMPANY

DESIGNERS AND MANUFACTURERS PLAIN AND LITHOGRAPHED METAL CONTAINERS CUSTOM OR STOCK DESIGNS

4700 N. OKETO AVENUE • CHICAGO 31, ILL.



Look what you
can do with it!



SEAL CARTONS inexpensively without mess or failure. "Scotch" Brand Carton Sealing Tape No. 260 sticks at a touch. Stays put. Meets government packaging Spec. PPP-T-76.



SEAL CONTAINERS of any size or shape. Thin and flexible tape has good tensile and tear strength in both directions; good adhesion and wet grab. Makes firm bond with no "creep."

On all kinds of shipping cartons...

Stick-at-a-touch tape holds in any weather!

No wetting. No rubbing. No re-sealing problems. "Scotch" Brand Carton Sealing Tape No. 260 sticks at a touch. Just lay it in place and press. Designed specifically for all-weather performance, it's unaffected by dampness or temperature extremes.

Takes roughest handling, too. When dry, this tape stands up under 50% more handling abuse than tapes of conventional construction—takes 400% more punishment when wet!

Ask your "Scotch" Brand tape distributor for a free demonstration. See how *other* packers cut costs and increase efficiency the "Scotch" Brand way.



NO FUSS, no muss. This inexpensive pressure-sensitive tape is ready to use any time, anywhere. No moistening required. No clean-up chores or daily care of dispensing equipment.



FREE FOLDER gives you all the facts on "Scotch" Brand Carton Sealing Tape and dispensers. Address Dept. EA-77, Minnesota Mining and Manufacturing Co., Saint Paul 6, Minn.

CARTON SEALING TAPE...one of over 300 Pressure-Sensitive Tapes, trademarked...

REG. U.S. PAT. OFF.

SCOTCH

BRAND

The term "Scotch" is a registered trademark of Minnesota Mining and Manufacturing Company, St. Paul 6, Minn. Export Sales Office: 99 Park Avenue, New York 16, N.Y. In Canada: P.O. Box 757, London, Ontario.





Only crystal-clear cellophane merchandises your product so effectively

...and only Du Pont offers you

Let's have a picnic!

I'll bring the franks...

I'll bring the rolls...

The franks are sizzling, the rolls are toasted brown. Golly, what a picnic! When you're planning a picnic, buy your franks and rolls in cellophane. That way you know they'll stay clean and fresh right to the minute you pop 'em on the grill. And, best of all, cellophane lets you see what you're getting ... choose just the kind you want.

Du Pont Cellophane

Franks 'n' rolls are at their best in Cellophane

the package that lets you see what you buy!

Du Pont Research is continually at work ... developing new types of cellophane ... to bring you the finest in packaging for the products you buy.

INSIDE DEFIANT POLAND I'm No Quitter

Jayne Mansfield ANYTHING FOR PUBLICITY

Now you see 'em... Now you don't

Franks 'n' rolls are at their best in Cellophane

1-2-3 and your shopping's done

Fruits and vegetables are clean and fresh in Du Pont Cellophane

POWERFUL NATIONAL ADVERTISING... For 30 years Du Pont has supported packagers in leading industries with effective national advertising. The idea brought home to readers... "You can rely on the quality of the products you buy in Du Pont cellophane."

A sparkling, crystal-clear package of Du Pont cellophane is one of the most important selling tools your product can have. To help you get the most from your cellophane package . . . Du Pont backs you with dramatic, full-color advertising in leading consumer magazines.

Du Pont also helps packagers with studies of America's buying habits, retail trends and packaging innovations. The results are compiled and pinpointed in informative, valuable reports like those shown below.

And on the packaging line, there's no material that handles so easily, so fast, so economically as cellophane.

For the full facts about cellophane . . . and for complete information on Du Pont's merchandising services

. . . contact your Du Pont Representative, Authorized Converter of Du Pont cellophane, or write E. I. du Pont de Nemours & Co. (Inc.), Film Department, Wilmington 98, Delaware.

SPECIFY DU PONT cellophane by code designation when you order. That way, you'll be assured highest-quality film, product of Du Pont research and experience. Du Pont manufactures over 100 varieties of cellophane to meet your particular packaging needs.



BETTER THINGS FOR BETTER LIVING . . . THROUGH CHEMISTRY

these complete merchandising services

Du Pont marketing studies help you get the most from your package



WHY PEOPLE BUY—This well-known Du Pont buying study has been made five times in the last 25 years . . . keeps you up-to-date on impulse-buying habits . . . shows you the reasons *why* shoppers buy *what* they do *when* they do.



WHO ARE TODAY'S BUYERS—Here is one of many studies made by Du Pont to show changing economic factors which affect marketing conditions (e.g., family size) . . . points out the best way to spend your packaging dollars.



HOW TO BUILD RETAILER ACCEPTANCE—One example is this study which shows manufacturers and wholesalers how bundling with Du Pont cellophane or "Mylar"® polyester film can meet retailers' needs . . . reduce shipping and carton costs.

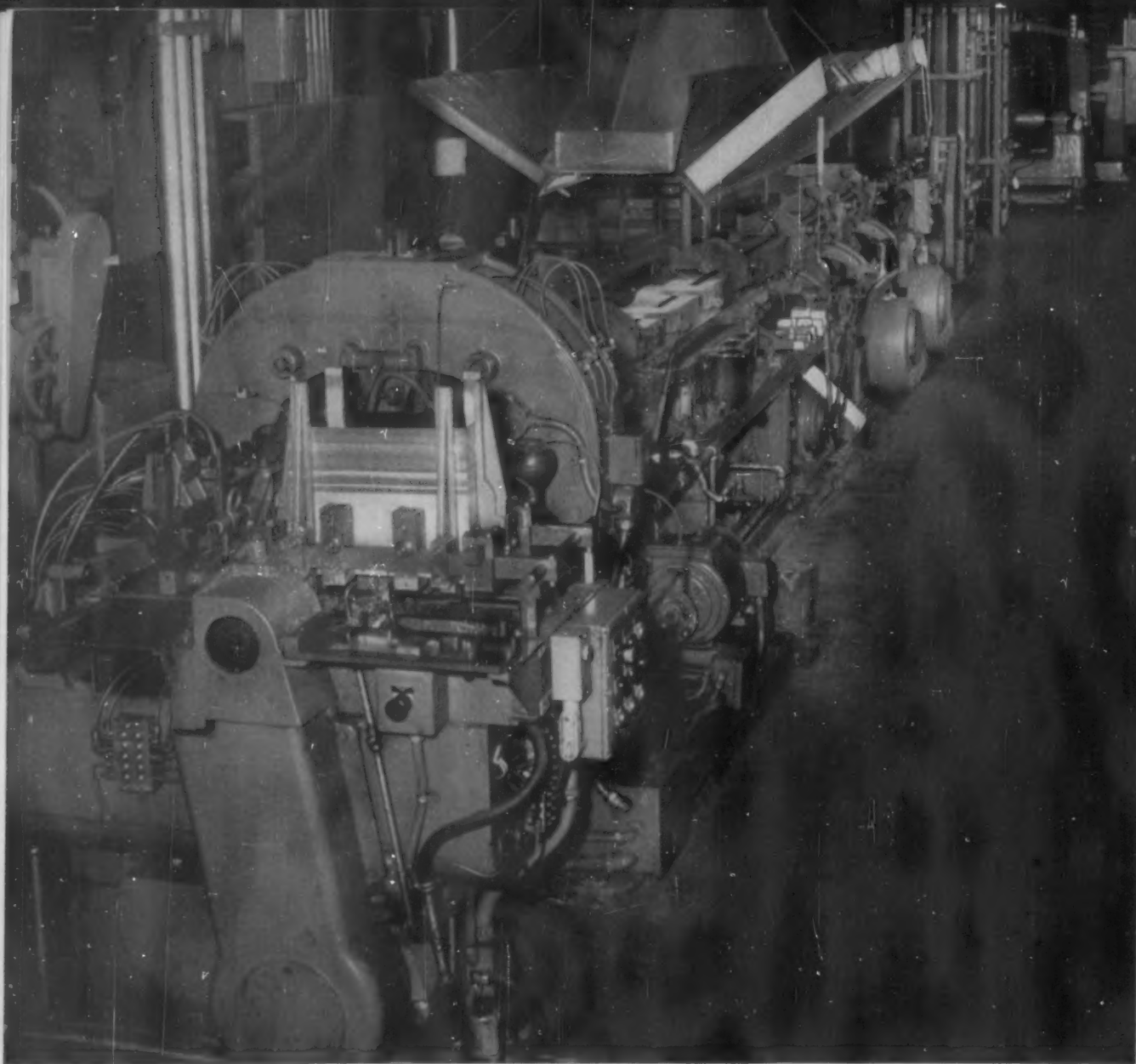


HOW TO INCREASE PROFITS—This typical study points out how manufacturers can increase profits on many food items by appealing to an important segment of today's shoppers willing to pay more for premium-quality products.

*MYLAR is Du Pont's registered trademark for its brand of polyester film.

DU PONT
cellophane

*leading the packaging field for 33 years
...designed for the needs of the future*



Pictured above is one of three Hamilton can machine lines installed at Sherwin-Williams' San Leandro, Calif., can making plant. This line includes a new Hamilton 501 bodymaker, flanger, duplex slitter and tester.

The Hamilton 501 bodymaker is extremely versatile— capable of handling cans up to 404 x 510

The new Hamilton 501 bodymaker is one of the most versatile high speed machines in its field—adjustments can be made readily to produce cans from 202 x 202 to 404 x 510 sizes. And high speeds can be maintained even in making the larger can sizes.

The Sherwin-Williams Co. is one of the can makers to recently install Hamilton 501 body-

makers and related Hamilton can machinery. Two Hamilton 501 lines are helping Sherwin-Williams manufacture a portion of its own can requirements, as well as supplying the package needs of other firms in the oil and paint industry.

Write today for complete details, including specifications, of the new Hamilton 501 bodymaker.

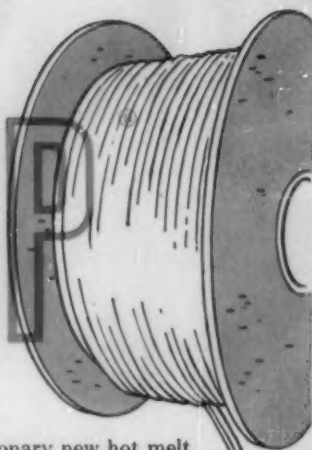
Hamilton Division Hamilton, Ohio

BALDWIN · LIMA · HAMILTON

Diesel engines • Mechanical and hydraulic presses • Can making machinery • Machine tools



THERMOGRIP



Masters Your Toughest Adhesive Problems

Thermogrip is a revolutionary new hot melt adhesive that's 100% working solids. It sets instantly on either porous or non-absorbent surfaces.

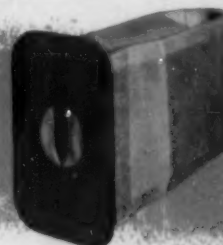
Thermogrip adhesives in rope-like form can be formulated to precise requirements and are being used with great success on polyethylene films, aluminum foil, wet strength kraft, porous filter stocks and PE coated materials in food packages, bags and specialties.



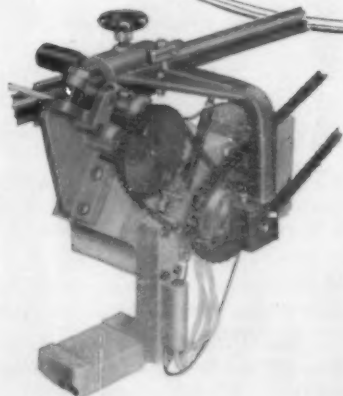
Better bonds at lower cost. Inside ply of polyethylene coated kraft in this large multiwall bag by Arkell and Smiths is seamed with Thermogrip, saving adhesive cost, giving quicker, stronger bond and providing moisture resistance.



Instant glue set on side seam of 10 pound potato bag prevents side seam slippage — gives Bemis Bros. reduced waste, improved bag quality — permits faster operation.



No wet through. Thermogrip on this porous material saves stock and cuts waste. Adhesive costs were lowered and adhesive handling improved by this easy to use instant set adhesive. These vacuum cleaner bags for Electrolux were produced by Shelmar-Betner Division of Continental Can Co.



Thermogrip adhesives are fed, melted as needed and metered to the work with Thermogrip applicators that can be adapted to many tasks and easily mounted on a wide variety of converting and processing equipment.

These unique adhesives can break present adhesive limitations, help you achieve easier handling, economies and greater speeds. Send today for literature and more information. Please describe product, material to be bonded and equipment you are using.

United
SHOE MACHINERY
CORPORATION
Industrial Sales Division

140 FEDERAL ST., BOSTON, MASS.
THERMOGRIP manufactured by
B. B. Chemical Co.,
Subsidiary



it pays to package in **SARAN WRAP**

If it's worth protecting, it's worth Saran Wrap* added protection. Add the complete transparency and unwilting beauty of Saran Wrap and you have the answer to flexible packaging that *sells*.

The greatest moisture barrier of all transparent films, Saran Wrap won't become brittle with age, won't cloud up, retains its beauty and protection in spite of customer handling.

The success of the Saran Wrap household roll is your cue to add the Saran Wrap name to your packages. Start your packaging off right with a line to THE DOW CHEMICAL COMPANY, Midland, Mich., Packaging Service PS1515E.

*Trademark of The Dow Chemical Company

YOU CAN DEPEND ON



CUSTOM MADE

FISHER'S

ALUMINIUM

Foils

FOR PERFECT PACKAGING



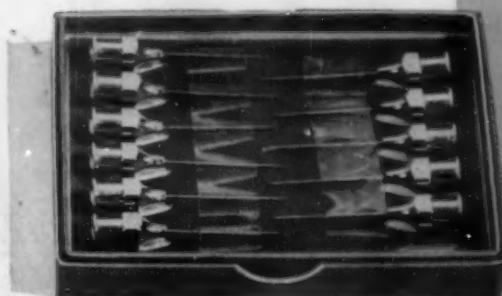
FISHER'S FOILS LIMITED, EXHIBITION GROUNDS, WEMBLEY, MIDDLESEX, ENGLAND
Tel: Wembley 6011

Cables and Grams: Liofnil, Wembley (A.B.C. Code 6th Edition)

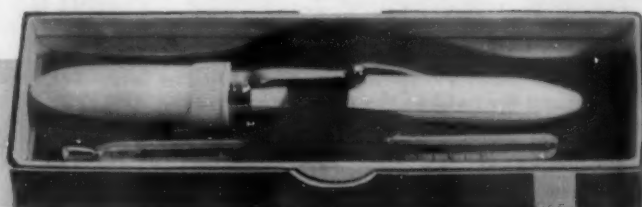
Rowell Boxes



Syringe Box



Needle Box



Thermometer Box

for distinction
and utility



E. N. Rowell Co. Inc.
BATAVIA, NEW YORK

Canisters, round and square set-up boxes for every purpose

SYSTEMATIC PACKAGING EFFICIENCY

BY **WOODMAN**



The WOODMAN Rotary Pak-Off

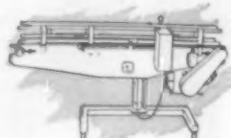
The Rotary Pak-Off accumulating table automatically receives the production line output, gathers and holds the product for "casing-up." This simple yet efficient machine, operating from a single driving motor, automatically allows for fluctuations in production or interruptions in casing thus allows the caser sufficient time leeway to prevent expensive production line shutdowns.



AIR-WEIGH WEIGHER



AIR-WEIGH-MATIC FILLER



VIBRA-BELT FILLER



KLO-SEAL KLO-STITCH

WOODMAN engineers systematic efficiency in packaging operations from fully automatic weighing, bag, box, jar or carton filling to conveying, sealing, stitching and casing.

Let a WOODMAN engineer show you how systematic efficiency through WOODMAN products can make money for you.

YOUR WOODMAN MAN
IS A GOOD MAN TO KNOW!

Offices in:

Boston	Fort Worth	New York
Chicago	Kansas City	Portland
Columbus	Los Angeles	Philadelphia
Detroit	Montreal	San Francisco

The
WOODMAN
Company, Inc.

Home office: Decatur, Georgia



This is a **CROSSETT BLEACHED BOARD** Customer

Look at him—corked off as soon as his head hit the pillow. No more haunting worries for him about what happens to his board supply when the market gets tight.

His supply of board is as sure as if he owned the mill—which in a sense he does. The day he established his board needs with Crossett, he took title to bi-monthly machine time that became his property for as long as he wants it.

Because ours is an independent mill, we are in complete control of where every pound of our output will go. Since we have no relatives, we sell it to whomever we like. We like regular customers.

CROSSETT
A DIVISION OF



PAPER MILLS
THE CROSSETT COMPANY

GENERAL
SALES OFFICE
CROSSETT,
ARKANSAS

BALTIMORE OFFICE
J. W. Taylor, Don Hodge
414 St. Paul St.

DALLAS OFFICE
H. E. Manner
3409 Oaklawn Ave.

CHICAGO OFFICE
L. J. Walker, D. W. Schwier
300 West Washington

CINCINNATI OFFICE
R. J. Lantry, J. T. Allen
3732 Lovell Avenue



VISQUEEN film cuts bag costs 50%, Trade Mark boosts production 67% for marble manufacturer

"We saved \$10,000 a year, got seven million more packages in the bargain, when we switched to automatic packaging with VISQUEEN film."

This is the report of Roger Howdyshell, general manager of Marble King, Inc., St. Mary's, West Virginia. He gets a radical production increase with the same labor force for a substantial saving in overall costs. Mr. Howdyshell also finds that the new package of VISQUEEN film increases shelf life and improves product eye appeal.

"Uniformity of VISQUEEN film has proved very important to us," says Mr. Howdyshell. "We have to keep our production rolling. We use different roll sizes of VISQUEEN, and the changeovers are accomplished in a minimum of time loss. Otherwise there is practically no down time. In every way VISQUEEN film is improving our profit picture."

information request tag
VisQueen
Trade Mark
clip this tag—#97
attach to letterhead, mail.

VISQUEEN film is all polyethylene, but not all polyethylene film is VISQUEEN. Only VISQUEEN film has the benefit of research and resources of VISKING COMPANY.

PLASTICS DIVISION

VISKING COMPANY Division of Union Carbide Corporation
P.O. Box 1410 TERRE HAUTE, INDIANA
In Canada: VISKING LIMITED, Lindsay, Ontario.

Rotogravure labels work hard at selling the packages they appear on. Rich, bold colors and sharp, flawless printing give these labels the extra boost they need to set them apart from their competitors on shelves and counters.

One unusual feature of **Rotogravure** service is our policy of no "minimum run" requirements. We look on each job as a marketing project that will tax our ingenuity and skill — not as a production order for feeding our presses.

Rotogravure produces every type of label, including heat seal and pressure sensitive, on paper and foil, in two to six colors. We also print foil, paper and laminated overwraps. And you can call on our Design Division for expert help in planning attention-commanding labels and wraps.

Hard working
foil labels
and wraps

Right now **ROTOGRAVURE**
foil labels and wraps are
hard at work in stores all
over the country, selling all
types of products.

Write for a
selection of samples,
and you'll see why.

Branches in principal cities.

Rotogravure
Packaging INC.
ADDISON, ILLINOIS



...because they went to their doctors in time

Many thousands of Americans are being cured of cancer every year. More and more people are going to their doctors *in time*. That is encouraging!

But the tragic fact, our doctors tell us, is that every third cancer death is a needless death...*twice* as many could be saved.

A great many cancers can be cured, but only if properly treated before they have begun to spread or "colonize" in other parts of the body.

YOUR BEST CANCER INSURANCE is (1) to see your doctor *every year* for a thorough checkup, no matter how *well* you may feel (2) to see your doctor *immediately* at the first sign of any one of the 7 danger signals that may mean cancer.

For a list of those life-saving warning signals and other facts of *life* about cancer, call the American Cancer Society office nearest you or simply write to "Cancer" in care of your local Post Office.

American Cancer Society



BERNARDIN

CLOSURES



...they pay their way in the consumer's hand

because

the firm seal easily yields to shopper's
hand — and adds re-seal convenience

Since 1881

BERNARDIN BOTTLE CAP CO. INC.
EVANSVILLE, INDIANA

SENSATIONAL PROSPECTS FOR PLASTICS PACKAGING . . .

with
**THERMOFORMED
CONTAINERS AND CLOSURES**
produced on the

FORMPACK AUTOMATION ROTARY



• **IN NEW SHAPES**—Hydro-Chemie exclusive Dropform process allows for depth/diameter ratios of 2 : 1 and over, with uniform wall thickness. Container walls may be vertical or deeply undercut, e.g., for horizontal ribs, jars, etc., and for threaded, snap-on or bayonet closures (see illustrations of products formed on "Formpack").

• **AT HIGHER SPEEDS**—"Formpack" Model R-7 Automation Rotary (see illustration) gives 20 shots per minute, each shot comprising full 10" x 12" formed area, with only 1/4" required between units. Example: disposable drinking cups 2" diameter, 3" deep, produced at rate of 24,000 per hour. Forming area variable steplessly. Cycle unaffected by sheet type or gauge.

• **AT LOWER COSTS**—Small area of molds and trimming dies reduces tooling costs to a minimum. Efficient clamping and forming systems cut down trim. Dropform's bi-directional orientation of sheet improves mechanical properties of formed product, allows thinner gauge sheet to be used.

• **WITH FULL AUTOMATION**—Thermoplastic sheet fed automatically from roll (two-stage, non-stop unwinding) or from stack (for non-reelable, thick sheets). Entire cycle automatic, including ejection of trimmed products and separate ejection of trim.

• **AND GREATER VERSATILITY**—Photocell indexed loading accurately aligns preprinted sheet over mold. Small formed area minimizes errors of registration due to stress-strain pattern in sheet. Small area per shot facilitates after handling. Trim ejection designed for easy dust-free transportation to reclaim station. Twin heater stations handle all thermoplastics including branched and linear polyethylenes.

FORMPACK* R-7

demonstrated
at International
British Plastics
Exhibition,
Stand J 21,
London, July 10-20th.



Write or cable manufacturers:

HYDRO-CHEMIE

Incorporated

"Claridenhof", 21 Dreikoenigstrasse
ZURICH • SWITZERLAND
Cables: HYDROCHEMIE ZURICH

* Registered Trademark, Patents Pending

Background

for

packaging

Notes,
quotes
and comments

Changes coming in plastic bottles will require a whole new evaluation of this vs. competitive containers. The term "squeeze bottle" may be outgrown if, as producers now expect, cheaper, lighter blown polyethylene bottles begin to compete as straight carriers of product on a cost and performance basis without regard to squeeze function. The changes that may make this possible are coming in new resins, new lightweighting and new linings. A 20-oz. bottle made of new-type resin weighs 18 gms. as against 42 gms. for the conventional resin. Developments in linings already have cut in half the list of "problem" products that couldn't be packed in polyethylene bottles. One producer last month trebled his production of lined bottles.

Important to keep in mind that the new "polymethylenes" (one name suggested to classify the new-type resins) are not just slightly modified polyethylenes—they are completely *different* materials, covering such a range of properties that it may take several years to uncover all of their uses in packaging. The limitations of conventional polyethylene just do not apply.

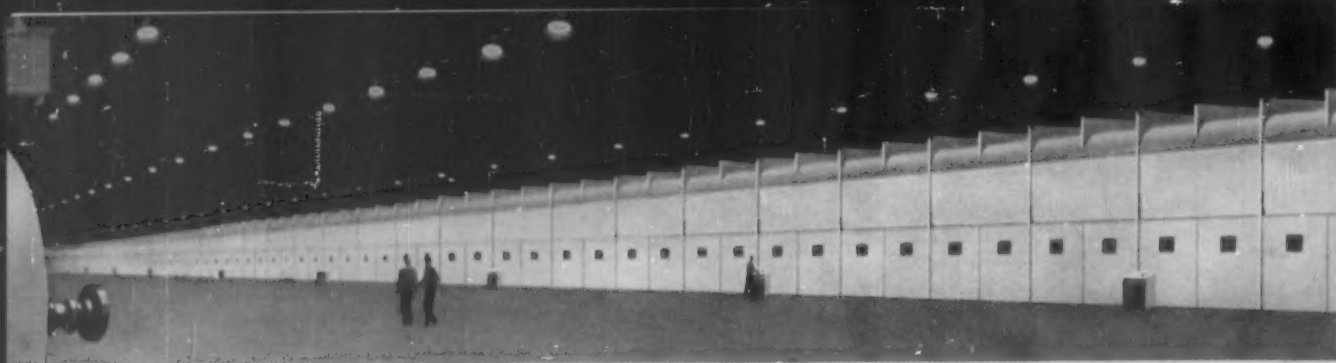
Watch aluminum make a strong bid for can business. Can companies, sore at steel makers over repeated price rises, are receptive. Beer cans made by impact extrusion are in regular use in Germany and the extrusion method has been used in this country on a small scale for seamless aerosol containers. Victor Metal Products starts impact extrusion this year and predicts it will sell aluminum aerosol cans at same price as tinplate. Meanwhile, Kaiser is reported readying four production lines at its new aluminum container plant in Wanatah, Ind., to make cans from aluminum sheet; it is understood that the first order, for 5,500,000 cans, has been received from a food company.

Advertising value of the package is placed in a new perspective by *Lassiter Packaging Letter*: Each week three times as many people see the package of a nationally advertised product as read *Life*; four times as many as read *The Reader's Digest*.

Developments in Europe promise a food retailing and packaging revolution within the next few years. *Carl W. Shaver*, sales director of Grand Union, predicts that European self-service marketing, now 25 years behind the U. S., will catch up in five to 10 years. Recent signing of the European Common Market Treaty has created a single marketing community of 161 million persons living in Belgium, France, Germany, Italy, Luxemburg and Holland—almost as big as U.S. Packaging interests in those countries already are working together in a European Packaging Federation.

No worry in the paperboard industry about foil and film displacing special food board in the packaging of pre-cooked frozen foods. Industry statisticians concede "strong" competition in this area, but predict that any losses will be offset by the development of new and expansion of present markets for food board—including the hardboard cigarette boxes. Demand for paperboard in general in 1957 is expected to be slightly above the corresponding 1956 level.

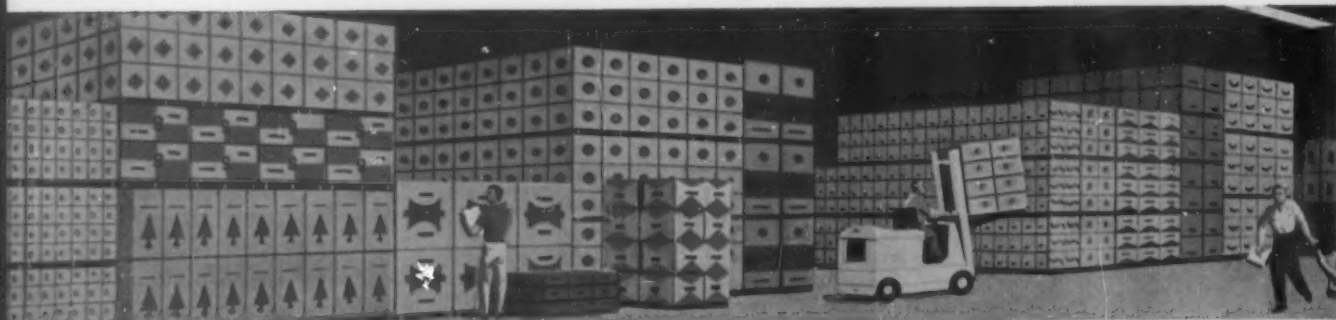
New fronts opening in the battle of manufacturers' vs. retailers' brands? *Grey Matter* points out that as supermarkets expand into non-food lines, they find new opportunities for [Continued on page 48]



A giant machine that makes 1,000




a new warehouse that stocks



...enough for as many as fifty



a new service from **St. Regis** 
PAPER COMPANY
150 EAST 42ND STREET, NEW YORK 17, N. Y.



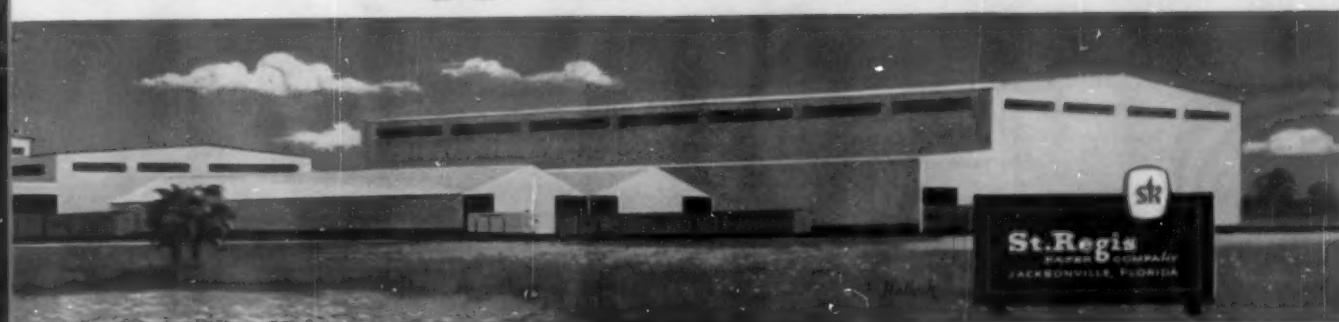
tons of Kraft linerboard a day...



25,000 tons in various weights



million shipping containers...



that builds its future on service

private-brand promotion. There is an A&P tooth paste under market test in Southern states. Wrigley supermarkets have introduced phonograph records under their own "Masterseal" label. More examples come to light daily.

Amazing growth of aerosol packaging is highlighted by annual report of the Chemical Specialties Mfrs. Assn. One of the record 320 million aerosols packaged last year was the one-billionth unit produced since the industry started only 11 years ago. Output for 1956 jumped 33% over 1955. Most significant is the rapid growth in pressurized personal products, which now account for about half of total aerosol production. Hair sprays last year took over the top position, displacing insecticides, which had held that spot ever since aerosols began.

Long fight over patent claims on method of taping two cans together end to end for merchandising deals appears to have thrown the method open to anyone who wants to use it. U. S. Court of Appeals in San Francisco has held invalid the Chun King patent, which was disputed by Oriental Foods, Inc., rival canner of Chinese foods.

Changed signals are in prospect on Packaging Institute participation in PMMI's second Machinery Show in Atlantic City next March. Latest word is that PI will agree to conduct two days of conference sessions in conjunction with the show, as a special activity separate from its own Annual Forum in the fall, October dates for which were announced last month through 1959. *Note:* The next Machinery Show is scheduled for 1960. Will the two Institutes then get together on a fall date, as they did last fall for the first show in Cleveland?

Variety stores become more and more like general department stores. *Variety Store Merchandiser* calls attention to the increasing emphasis on larger and higher-priced items in the housewares and appliance fields—toasters, irons, fans, percolators, grills, vacuum cleaners—as the variety stores add millions of square feet of sales area.

Keep an eye on polystyrene film and sheet. The new biaxially oriented material is crystal clear and exhibits none of polystyrene's characteristic brittleness. Now being produced in gauges from 1 to 20 mils, it has FDA acceptance for food packaging, is odorless, tasteless and dimensionally stable from minus-20 to plus-158 deg. F. It can be beautifully printed by rotogravure or flexography. As film, it is priced between cellophane and acetate. A blend with acrylonitrile makes a superior grease barrier.

A legal decision of possible far-reaching implications for packagers is the finding of a New York city court that Planters Nut & Chocolate Co. is responsible for damage to a customer's teeth due to a piece of wire that found its way into a candy bar. In his precedent-setting decision, *Justice John J. Mangan* declared that "the manufacturer who packages a product and offers it for sale *guarantees*, in effect, that it is fit for human consumption. *It is not necessary for the injured party to prove negligence.*" If the decision stands up, it will affect the manufacturer of every food package sold in New York State.

Rumors are confirmed regarding two surprising departures from precedent at next year's AMA National Packaging Exposition, first to be held in New York's new Coliseum and first in New York in many years: (1) there will be a \$2 charge for admission and (2) it will be the first five-day show, extending through Friday, May 30—Memorial Day. The admission charge, first in the history of the show, is intended to keep out idle sightseers—but will anybody other than idle sightseers be in New York on a three-day Memorial Day week end?

Background

for

packaging

[Continued from page 45]

NEXT TIME YOU NEED

LABELS

... PLANEFULL ... BOXFULL ...



... or want more "sell"
for your specialty—whether
this requires labels, box
covers, printed films, bags
or envelopes — you'll get
what you need from ...

Loading 10,000 pounds of labels
for shipment by air freight to a
Package Products customer.

Package  Products

CHARLOTTE, N. C.

SALES OFFICES IN DALLAS • KNOXVILLE • NEW YORK • PHILADELPHIA • TAMPA

DESIGNERS, PRINTERS AND FILM CONVERTERS FOR PACKAGING

How CAMPCO ACETATE adds see-level ...buy-level... sales appeal



When customers can see . . . they buy. And when your blister packs are made of CAMPCO acetate, they're sparkling clear—yet surprisingly strong, even in thinner gauges.

For example: the fish lure you see above. What better way to display lures—yet protect the hooks? . . . And what better way than those shown below at right, to package small hardware? . . . Or, notice the sample pill pack. It carries its own professional sales message, built right in.

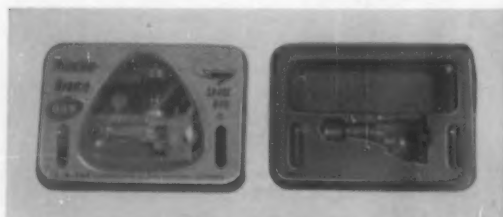
CAMPCO acetate makes see-level packaging and selling possible at unusually low cost. It's easy to form, won't cloud or discolor because of CAMPCO's special non-blushing formulation, and is ideal for short runs or long. Also, combining it with liners or package bottoms made of CAMPCO "Registrite" sheet makes an attractive merchandiser such as the Thimble Drome package by L. M. Cox Mfg. Co., Inc., Santa Ana, Calif. (shown directly below). This rubber modified styrene sheet comes in glossy or mat finish plus a variety of designs ranging from woodgrains to polka dots. Most gauges and finishes available immediately from stock.

But whether it's pills or toys—acetate, butyrate, or styrene—it pays to use CAMPCO sheet and film. They'll put real see-level in your packages. For details, write:

CAMPCO sheet and film a division of

Chicago Molded Products Corp., 2708 Normandy Ave., Chicago 35, Illinois

STYRENE • ACETATE • POLYETHYLENE • RIGID POLYETHYLENE • BUTYRATE • COPOLYMER STYRENE



*These packages manufactured by Plastic Container Div. of Plastofilm Inc., Wheaton, Ill.

WINNING COMBINATION

for fast, low-cost, dependable packaging



GILDA

HIGH SPEED, AUTOMATIC

FILLING and SEAMING MACHINES

Give yourself these big advantages --

GREATER SPEED . . . Up to 300 cans per minute. Speed adjustable over a wide range to synchronize with your other machines.

COST-SAVING ACCURACY . . . Filling accurate to a fraction of an ounce, GILDA machines can save you a ton or more of material every day!

VIRTUALLY FOOLPROOF . . . Numerous devices protect against damage from faulty cans or covers. Automatically compensate for variations in can heights and cover thicknesses.

FAR LOWER OPERATING, MAINTENANCE COSTS . . . Relatively simple, ruggedly constructed of the finest materials, fully protected against dirt and abrasive dusts.

EXTREME VERSATILITY . . . Filler: handles any powder, granular or dry material; fills metal or fiber cans $4\frac{1}{4}$ " to 7" in height. Seamer: puts on tops or bottoms; accommodates any can height from 3" to 8". BOTH MACHINES CHANGE OVER FROM ONE CAN HEIGHT TO ANOTHER IN MINUTES!

END YOUR PACKAGING PROBLEMS . . . Invest in an installation that will insure faster, finer packaging at lower cost than you ever thought possible. Get the facts now! Write for descriptive literature or a consultation with a P&J GILDA Packaging Specialist. Potter & Johnston Company, Pawtucket, Rhode Island. (Subsidiary of Pratt & Whitney Co., Inc.)



Now manufactured by

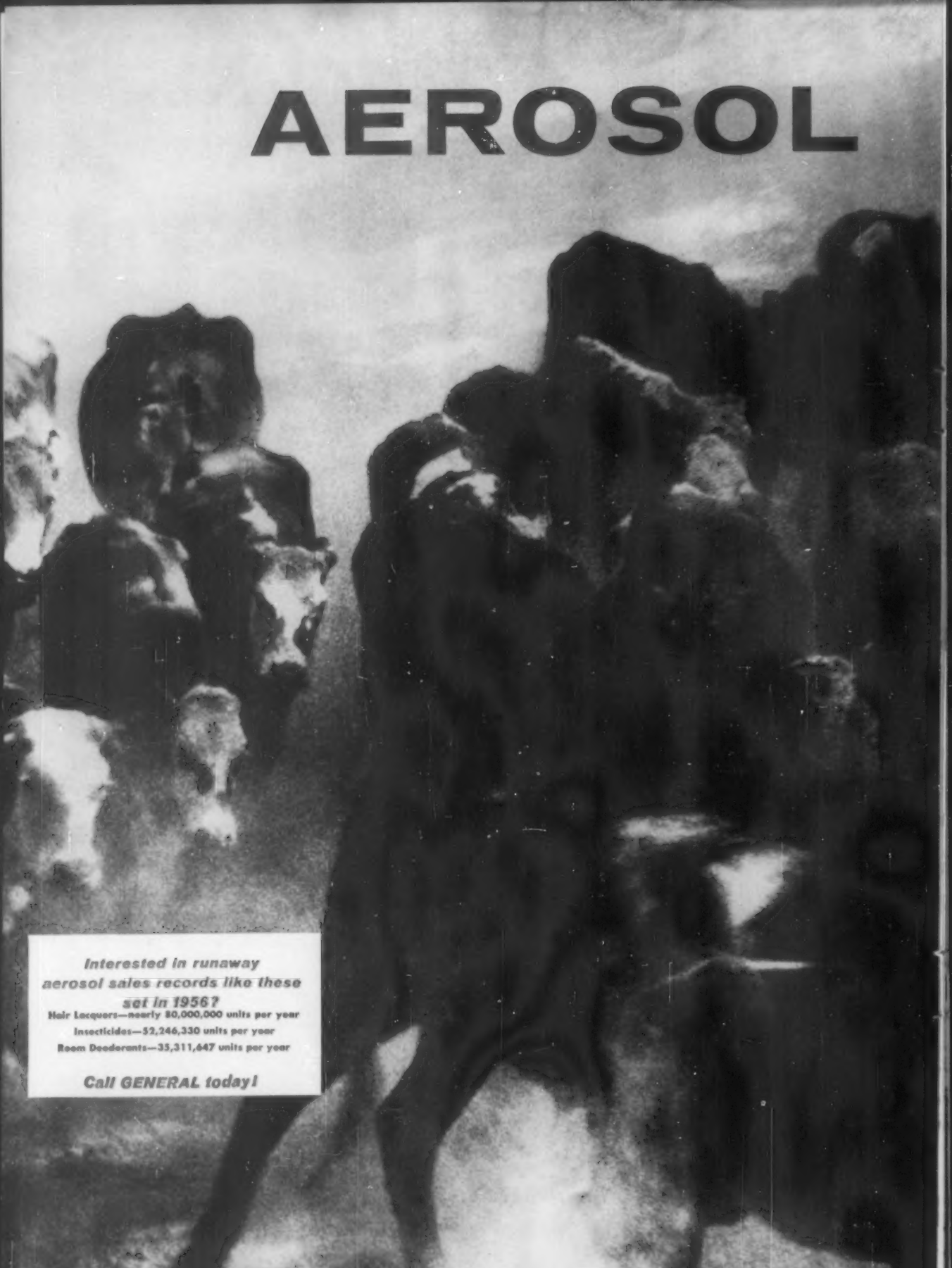


POTTER & JOHNSTON

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AUTOMATIC TURRET LATHES • NEWARK GEAR MACHINES • GILDA PACKAGING MACHINES

AEROSOL



*Interested in runaway
aerosol sales records like these
set in 1956?*

Hair Lacquers—nearly 80,000,000 units per year

Insecticides—52,246,330 units per year

Room Deodorants—35,311,647 units per year

Call GENERAL today!

PACKAGING

can start a sales stampede —for you!

You've seen it happen with hair lacquers . . . shave creams . . . insecticides.

Established types of products . . . or new ones . . . it makes no difference. Each year booming aerosol sales hit new highs.

Is *your product* a likely candidate for aerosol packaging too?

Yes, if it can be sprayed, brushed on, dusted or daubed. And here's how to make the first move that might lead to a sales stampede for you.

Call General Chemical for technical and market advice. No cost or obligation. If your product needs development, we will work with you. Whenever you are ready to market, we will direct you to capable contract fillers who will put up your product in aerosol form for test marketing as well as handle commercial production afterwards. To arrange for a special presentation on aerosols and the growing aerosol market, write or call "Genetron" Department, General Chemical Division, Allied Chemical & Dye Corporation, 40 Rector Street, New York 6, N. Y.



genetron[®]
AEROSOL
PROPELLANTS

**The Right Propellant
for Every
Aerosol Need!**

Call on General for:



Free fact-packed technical manuals, market information



A complete aerosol research and development laboratory



Data on many promising new types of aerosols



Field assistance with propellant storage, handling, etc.

GENERAL CHEMICAL DIVISION • Allied Chemical & Dye Corporation
40 Rector Street, New York 6, N. Y.

almost every frozen seafood product ...



has more glittering display value ...

greater heat-and-serve consumer convenience ...

when it's in a proven-by-sales package by ...

The Plus Container



EKCO-ALCOA CONTAINERS Inc.
Wheeling, Illinois

EKCO is the registered trademark of Ekco Products Company. ALCOA is the registered trademark of Aluminum Company of America. The corporate name and combination mark, EKCO-ALCOA, is used under license to the manufacturer by each of these companies.

*glass
containers
move
more
drug
products*



*Use Anchorglass® containers
sealed with Anchor® caps*



... because they permit product visibility

GLASS-PACKED products attract attention, show the contents, make selections easier and faster, speed up store traffic. By guaranteeing 100% inspection, the glass package establishes market and public acceptance. With the visibility afforded by a glass container, you see your products at all times to better control proper packing. And when you pack in glass you accentuate the quality and purity of your products with the brilliance, sparkle and sales appeal of glass. Pack and move more of your products in quality controlled Anchorglass packages.

ANCHOR
HOCKING
GLASS CORPORATION
Lancaster, Ohio



Baby Playthings



Toddler Toys



Housewares



Modern House Fittings



Outdoor Living Aids



Containers & Packaging

Symbols of your potential through Tupper Corporation



Premiums



Do-It-Yourself Materials

• Whatever your custom needs in plastics manufacturing, call on Tupper's wide experience and modern manufacturing facilities. Our large, up-to-date plants, equipped with the best production machinery, are available for materials, injection molding, extruding, vacuum forming, blow molding—and other advanced processes.

The Tupper Engineering Department has developed the greatest number of patents in the industry for polyethylene seals, closures, and dispensers—and other items in other plastics. This know-how can be tapped by you to place your plastic products in a position of leadership.

Tupper seals and other Tupper products are protected against unauthorized manufacture by about 150 U. S. and foreign patents and patents applied for, plus numerous trademarks and copyrights.

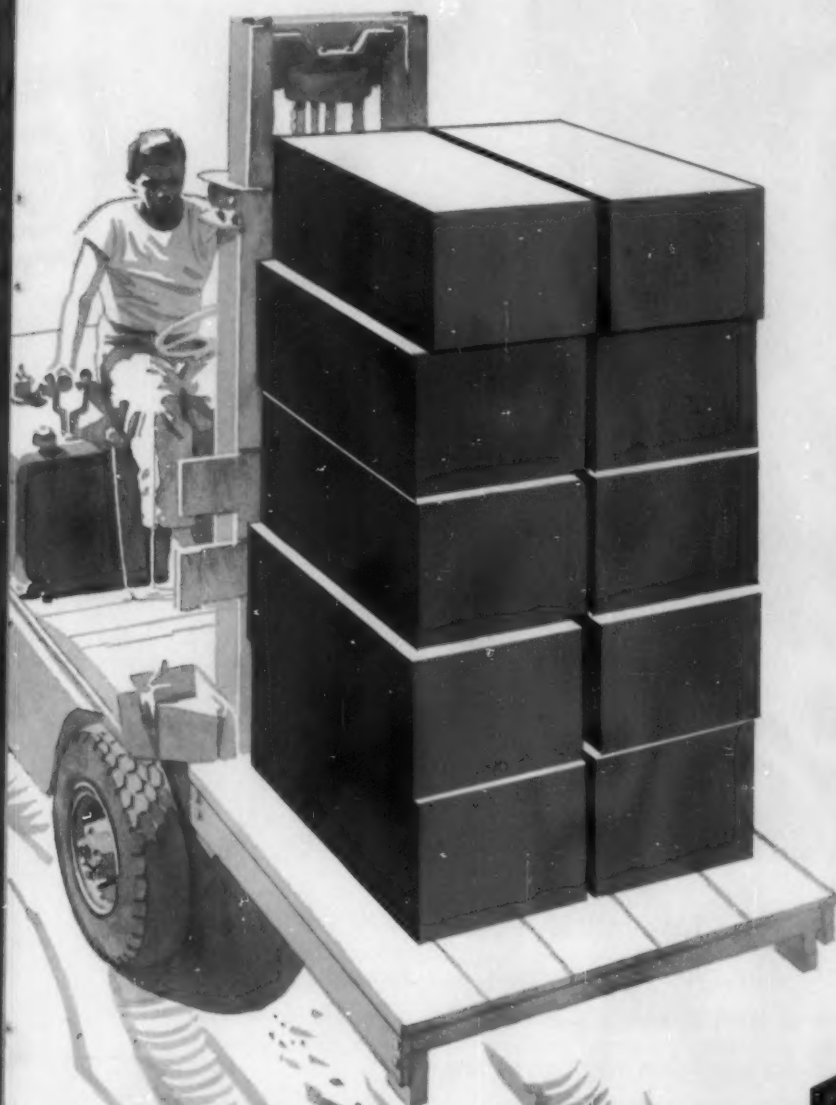
TUPPER CORPORATION

Manufacturers of: CONSUMER, INDUSTRIAL,
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TUPPER!
Trade-mark

IC* PAPER COATINGS Span Every Requirement . . .

CONTAINERS *will not slip* EVEN ON INCLINE



with
**New Non-Slip
Emulsion**
for higher, safer stacking

Enjoy *new safety* in handling and stacking—with IC-101 non-slip emulsion! A thin coating sprayed on heavy Kraft bags, boxes, or cartons lets you stack higher safely . . . minimizes breakage, handling time, and accidents. They actually *clutch* each other . . . providing maximum protection from spills in warehousing and shipping. Consider the special importance of this emulsion on cartons containing bottles or other glassware.

In addition to its excellent non-slip qualities, enjoy these other big advantages of IC-101:

- Contains no organic solvents
- Thins with tap water
- Retains good adhesion—even after repeated rubbing
- Reduces ink smudge for neater, cleaner packaging
- Sheets can be sprayed in open air easily—without special booths or ventilation equipment
- Can be used in a web operation without loss of speed or at the delivery end of a printer-slotter

For all the facts on IC-101, contact your IC Paper Coatings Specialist or write for the new IC Paper Coating Bulletin.

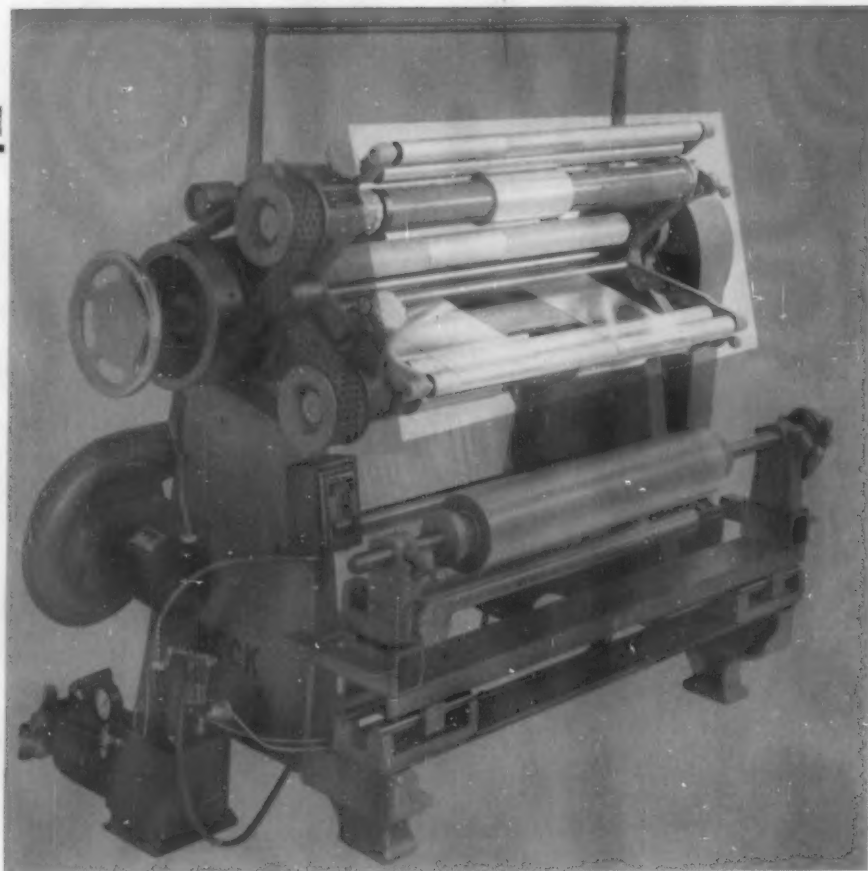


Interchemical
CORPORATION
Finishes Division

Headquarters Office: 224 McWhorter St., Newark 5, N.J.

Factories: Chicago, Ill. • Cincinnati, Ohio • Elizabeth, N.J. • Los Angeles, Calif. • Newark, N.J. • Mexico City, Mex. In Canada this product is made by Aulcraft Paints Limited, Toronto, Ontario and sold under its trademark. *IC is a trademark of Interchemical Corporation.

For light gauge, stretchy films
ONLY the BECK SLITTER
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feature!



Counter-balanced Lay-on Rolls lightly smooth the film onto the Rewinds, for straight, wrinkle and stretch free rolls — each has individual web tension to control core slippage. Write for full information today on the Beck Razor Blade Slitter.

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Automatic Roll Sheet Cutter • Razor Blade Slitter and Rewinder • Shear Cut Slitter
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*Season Your Selling
with*

**NIBROC[®]
White**



Today's food package is called upon, as never before, to stand up and give a first-rate account of itself in stores and supermarkets. It has to be seen—quickly, impressively, persuasively. It must start the sale as well as protect the product.

That's why International Salt Company chose Nibroc White for its 5-pound bag of Sterling Salt. Nibroc's bright white surface makes a perfect background for the eye-catching package design featuring "Salty," Sterling's colorful trade character.

Nibroc White is strong, clean, economical; perfect for bag forming, filling and closing machines.

For superior visibility, printability, workability use Nibroc White—super-calendered and/or embossed. You'll find it unexcelled for giving products such as salt, flour, mixes, sugar, rice, coffee, cocoa, maximum package appeal. Bring us your problem. Let our local representative show you samples. Write our Paper Sales Division, Dept. RD-7, 150 Causeway Street, Boston 14, Mass. Mills: Berlin, N. H.

Made Whitest Ever by New "WHITE MAGIC" Bleaching Process

BROWN COMPANY

This is an actual photograph taken through Chippewa FAIRLON



PHONE PARK 3-4637

CHIPPEWA FALLS • WISCONSIN

Now-Specify FAIRLON by Chippewa

A new, distinctive
packaging material--
Far Clearer, Far Stronger!

Highest gloss polyethylene
available. Puts life and sparkle
in your package. Truly today's
greatest advancement for Modern
Packaging. Shows all of your
product and permits it to keep that
"fresh-from-factory" look!

FAIRLON by Chippewa combines both clarity and strength, prime
assets to you in merchandising your product. Chippewa Plastics
does NOT manufacture polyethylene bags. Consult the convertor
nearest you for this service, and when discussing your needs
with him, specify bags made of FAIRLON to assure your product
the finest in modern packaging. You cannot afford to overlook
this newest advancement in better package merchandising.

----- Clip and Mail this Coupon TODAY! -----

Chippewa Plastics, Incorporated . . . Chippewa Falls, Wisconsin

Gentlemen:

- ☐ Please have your
representative call.
- ☐ Please send data and
samples of FAIRLON.
- ☐ Please send name of
FAIRLON convertor nearest me.

Name _____

Firm _____

Address _____

City _____ State _____

... SPECIFY

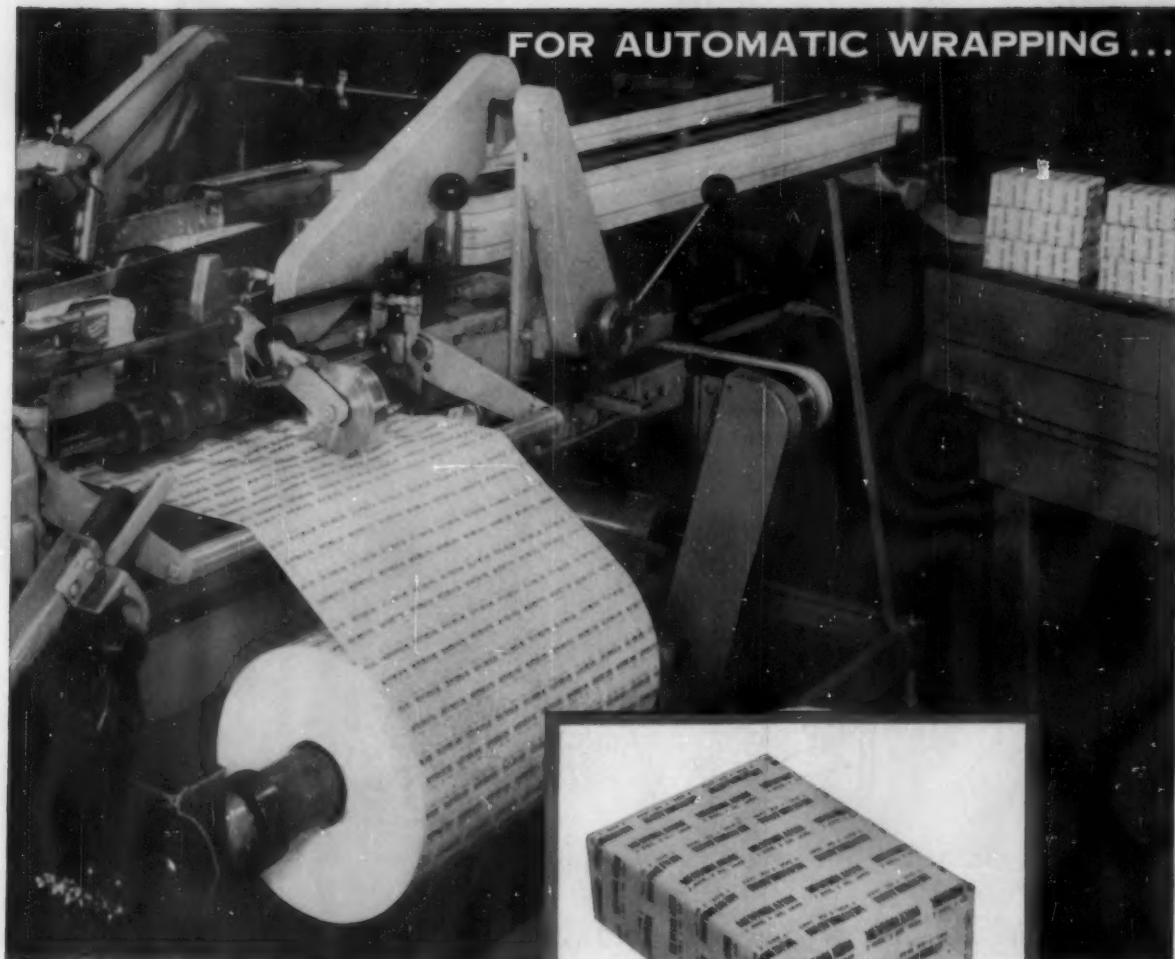
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CLEARER, STRONGER
POLYETHYLENE PLASTICS BY



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USES INTERNATIONAL ECONOMY MG

One of the world's most widely used wrapping papers.

ECONOMY MG is rugged, tough. Like International's unbleached Gator-Hide it is especially made to take all automatic wrapping operations . . . quality controlled from forest to finished product.

If you have a problem in automatic wrapping, call us.



"wraps
a world of
products"

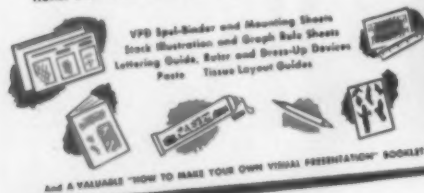
International Paper COMPANY
SOUTHERN KRAFT DIVISION
220 East 42nd Street, New York 17, N. Y.

Professional-looking
do-it-yourself sales
presentation does it with



UNIQUE VPD SELL-IT-KIT COMES COMPLETE
SELLS FOR ONLY \$8.95

Available from the Joshua Meier Co. of New York, or from stationery dealers, the VPD Sell-It-Kit includes everything to make professional-looking sales presentations. Just look what this new do-it-yourself kit offers:



And a valuable "HOW TO MAKE YOUR OWN VISUAL PRESENTATION" BOOKLET

JOSHUA MEIER'S VPD SELL-IT-KIT DEPENDS ON ACETATE FOR BETTER VISIBILITY, PROTECTION, DISPLAY

There's no better material for enhancing visual appearances . . . for stimulating sales . . . than Celanese acetate. Because of this, acetate is most widely used where sales appeal shows immediate results.

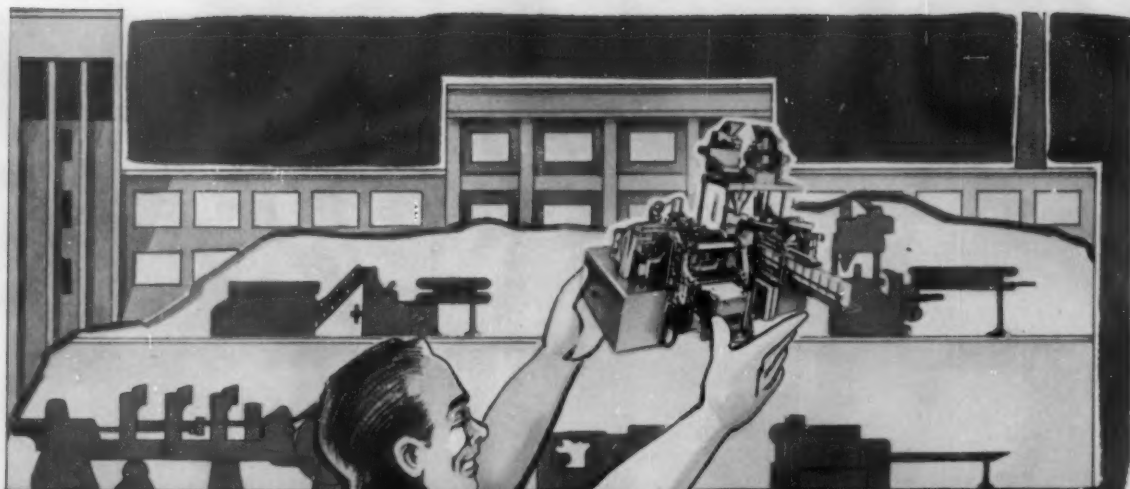
Joshua Meier's VPD Sell-It-Kit is a good example of this. It depends on acetate's sparkling grainless clarity to help you tell a clear sales story. And because acetate stays flat, can be easily cleaned, sales presentations remain fresh looking—retain full selling impact, even after long use.

Celanese acetate has proved itself the perfect material for making better first impressions, for visual selling—that's why so many manufacturers use acetate in entire lines of sales presentations and visual recording systems.

Celanese Corporation of America, Plastics Division, Dept. 108-G, 744 Broad Street, Newark 2, N. J. Canadian Affiliate: Canadian Chemical Co., Limited, Montreal, Toronto, Vancouver. Celanese®

Celanese ACETATE SHEETING

Export Sales: Amcel Co., Inc. and Pan Amcel Co., Inc., 180 Madison Avenue, New York 16, N. Y.



HESSER

In South America

Just exactly supplied
all the **PACKAGING and PRINTING**
equipment

for a new macaroni manufacturing plant

HESSER furnishes
Carton Printing, Cutting and Scoring
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Automatic Carton Windowing
Machine
Accurate Scale Weighers
Fully Automatic Packaging Machines
for both short and long macaroni as
well as noodles

All machines are in continuous operation,
giving dependable, satisfactory service under
full production conditions.

If you are contemplating a new plant . . . or if
your present packaging needs renewing —
or improving, why not let us help?
Just contact:

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73 Broadway, New York 4, N.Y. — USA

Western USA

JAMES HALE & CO.

182 Seventh Street, San Francisco — Calif.

CANADA and LAKE DISTRICT
PACKAGING EQUIPMENT

Service Limited — 124 Willowdale Street,
Willowdale, Ontario

SOUTH-WESTERN USA

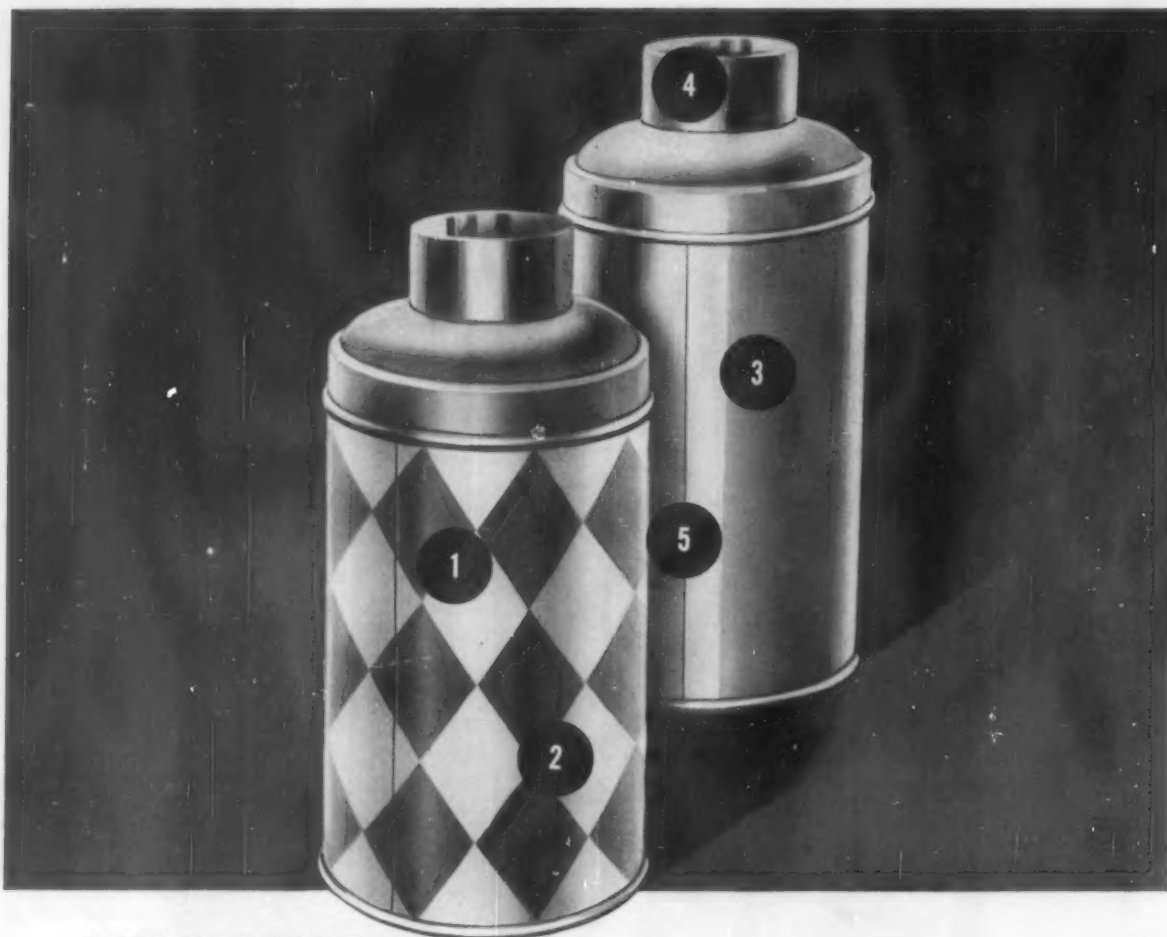
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FR. HESSER

MASCHINENFABRIK AKTIENGESELLSCHAFT
STUTTGART - BAD CANNSTADT





FIVE REASONS

WHY CLARK METAL CONTAINERS ARE A profitable investment for sales

Capture impulse sales and inspire repeat business with containers from J. L. Clark for these reasons: ① compelling design from Clark's own Impulse Design Studio. ② Attention-getting lithography. ③ Metal, the veteran packaging material; bump it, drop it, it's light, non-breakable. ④ Proper closures convenient for the customer to use. ⑤ Seams that are strong and tight. Clark containers help you on your production line . . . they're always easy to fill; less spillage, no breakage. Talk in terms of your specific needs with a Clark container specialist—see how you can increase sales with Clark lithographed metal containers.



Write for Booklet

Today, write for a copy—"Does your container have a high I.Q.?" Read how Clark puts pulse into impulse sales. J. L. Clark Manufacturing Co., Rockford, Illinois; Liberty Division Plant and Sales, Lancaster, Pa.; New York Sales Office, Chrysler Bldg., New York 17, New York.

Lithographed Metal Containers **J. L. CLARK**



LusterBoard

MOVES IN THE BEST CIRCLES

Accepted leaders, such as Neiman • Marcus, famous for superb quality and discrimination, choose LusterBoard as the fitting accompaniment to their fine merchandise.

LusterBoard's sparkle, strength and unsurpassed working qualities are a joy to both the customer and to the carton manufacturer.



Examine the LusterBoard: Notice its clean white surface and back. Test its unique strength and folding qualities.

For further information and samples:

S. D. Warren Company

89 Broad Street, Boston 1, Massachusetts



Printing Papers

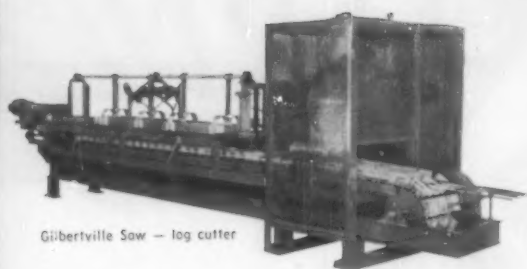
WARREN'S

LusterBoard

THESE SPECIAL CONVERTING MACHINES ARE

DELIVERING THE PERFORMANCE WE PROMISED

ASK THE COMPANIES THAT OWN THEM



Gilbertville Saw — log cutter



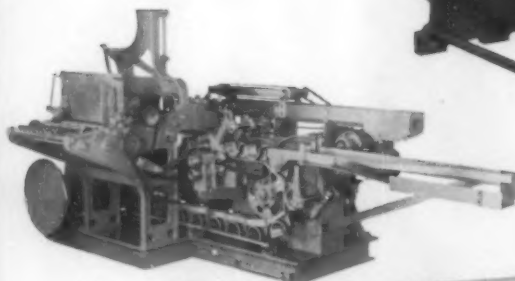
Wax Laminator



Crepe Machine



Gumming Machine



Toilet Roll Wrapper



Constant Tension Automatic
Edge Guide Backstand

printing presses, rewinders, embossers, folders,
napkin and core machines and special converting machines

**PAPER CONVERTING
MACHINE COMPANY**

GREEN BAY, WISCONSIN



Which of these remarkable new BBD Flexographic Inks is best for you?

"S-700" SAFE-T-BRITE

OR

"M-700" MUL-T-BRITE

Here's what **SAFE-T-BRITE** and **MUL-T-BRITE** have in common...

Both belong to BBD's "700 Series" family of modern multi-purpose inks formulated on a new *non-alcoholic* solvent system. Both afford more gloss, more color strength, more mileage, more freedom from blocking, more water-resistance than you can get from any con-

ventional alcohol ink. Both will print on a variety of stocks, resulting in lower ink inventories and more operating flexibility. Both can be used on flexographic as well as rotogravure presses. Both are winning enthusiastic acceptance by converters here and abroad.

Here's where **SAFE-T-BRITE** and **MUL-T-BRITE** differ...

SAFE-T-BRITE

prints on POLYETHYLENE (treated), "MYLAR", "SARAN"-COATED CELLOPHANE, ALUMINUM FOIL and GLASSINE.

MUL-T-BRITE

prints on the same stocks shown above plus PLAIN and MOISTURE-PROOF CELLOPHANES.

SAFE-T-BRITE

is recommended primarily for use on inline printing equipment operating at speeds to 225 fpm.

MUL-T-BRITE

is recommended primarily for use on roll-to-roll presses operating at speeds to 500 fpm. (It may be easily modified for use on slow-speed presses too).

SAFE-T-BRITE

has a flash point far higher than that of conventional alcohol inks. This extra safety factor is a bonus feature that can contribute to lower insurance costs.

MUL-T-BRITE

has a flash point comparable to that of regular alcohol flexographic inks.

SAFE-T-BRITE

has no adverse effect on either NATURAL or SYNTHETIC (Buna "N") plates and rollers.

MUL-T-BRITE

has no adverse effect on SYNTHETIC (Buna "N") plates and rollers.

The facts above are presented to help you select the "700 Series" Ink that suits your needs best. But, if you want to turn out printing on a quality level previously unobtainable and if you want to improve your production efficiency too, be sure to choose and use *either* **SAFE-T-BRITE** or **MUL-T-BRITE**. Both are available now—in black, white and all colors—from your nearest BBD plant.



Fact-filled "700 Series" Technical Data Sheet and printed samples available on request to **Bensing Bros. and Deeney**, 3301 Hunting Park Avenue, Philadelphia 29, Pa.

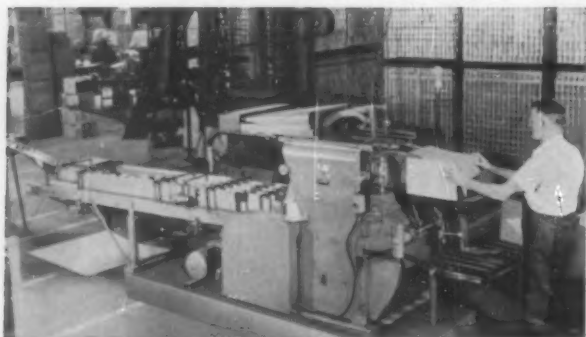


DISTRIBUTORS:
HANTON PRINTING INKS LTD., Toronto
TRENAL CO., Brussels, Belgium
COLORA LTD., Geneva, Switzerland
PIRELLA GÖTTSCHE LOWE, New York (Export)
PAMEL, INC., San Francisco (Export)

DOES YOUR PACK SUFFER *Bowling Ball Impact?*



Time to replace with a New Improved FMC NON-SHOCK CASER
—so *Smooth and Gentle* to Cans and Contents



FMC's NON-SHOCK CASER "babies" cans into cases at a fast clip, limited only by the speed of the operator.

NO ROLLING—NO HEAR SEAM IMPACT

Cans enter the machine upright, move smoothly along waven wire belt, are transferred gently to the case.

NO CAN ELEVATOR REQUIRED

Cans are delivered to the continuous feed belt through a 90° twister, avoiding the seam-splitting action of steep gravity-roll contact.

FREE BULLETIN AVAILABLE

Fully illustrated Non-Shock Caser bulletin is yours for the asking. Better yet, call your FMC representative today for complete information!



—even at speeds up to 1200 cases per hour!

Old methods of casing no longer meet the requirements of spoilage-free, high-speed operations—especially where loosening can seams of high-vacuum packs is a problem. The new Model 3 FMC Non-Shock Caser, with all its exclusive features for big capacity and gentle handling, really "delivers the goods" to the case completely free of damaging impact to cans, labels or product. Compact and flexible, machines are built to handle specific can sizes and certain combinations from 202 x 308 packed 6 x 8, to 603 x 700 packed 2 x 3.

Remember: There are extra dividends when you care for your cans all the way to the case—with an FMC Non-Shock Caser!

**FOOD MACHINERY
AND CHEMICAL CORPORATION**

Canning Machinery Division

General Sales Offices:

WESTERN: SAN JOSE, CALIF. • EASTERN: HOOPESTON, ILL.



*The outward
sign of
inward value*

3

Ⓕ

SALES APPEAL • a winning quality in packaging, too

Who can resist a ship like this, a well-nigh perfect package? Your eye responds to its clean colorful vitality. Your mind respects its precise planning, its superb performance. And then your heart begins to wish. That's sales appeal! . . . You might measure your own packaging for comparable qualities. Your shipping cases, your printed cartons, how well do they

sail, to make people look and want and buy? Consider inviting Fibreboard's crew of packaging experts to come aboard, to discuss an overhaul or design a whole new craft. To start, talk with our nearby representative, a man qualified to be first mate to your product, your production line, your sales staff. Nation-wide offices and services listed on back of this page.

FIBREBOARD

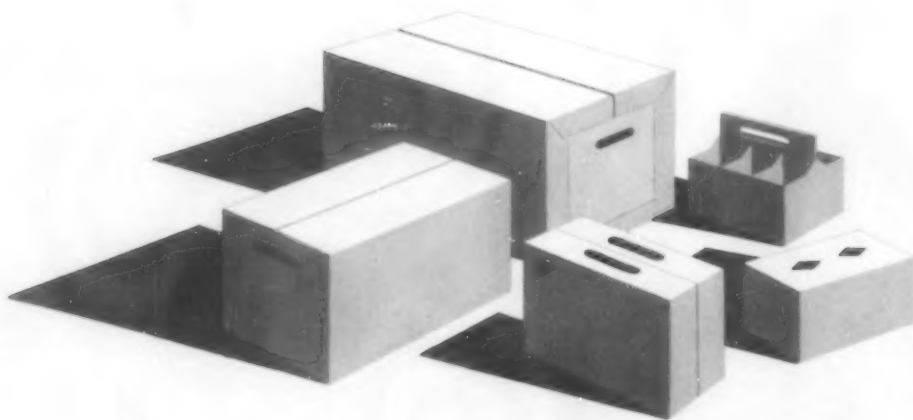
PAPER PRODUCTS CORPORATION



For Beverage Packaging . . . Look to FIBREBOARD FIRST

Year after year, many leading Brands, especially western best-sellers, go to market in Fibreboard carriers, cartons and cases. Because our personal services, creative planning, and strategic supply points provide unusual advantages. Let our sales representative show you examples of containers that save time and loss, yet merchandise your products and your identity forcefully.

**Corrugated Cases Solid Fibre Returnable Cases Carriers
Folding Cartons Stock or Special-Made-to-Order All Sizes
All Styles Plain or Printed Superlative facilities for
Letterpress Lithography Rotogravure Flexography**




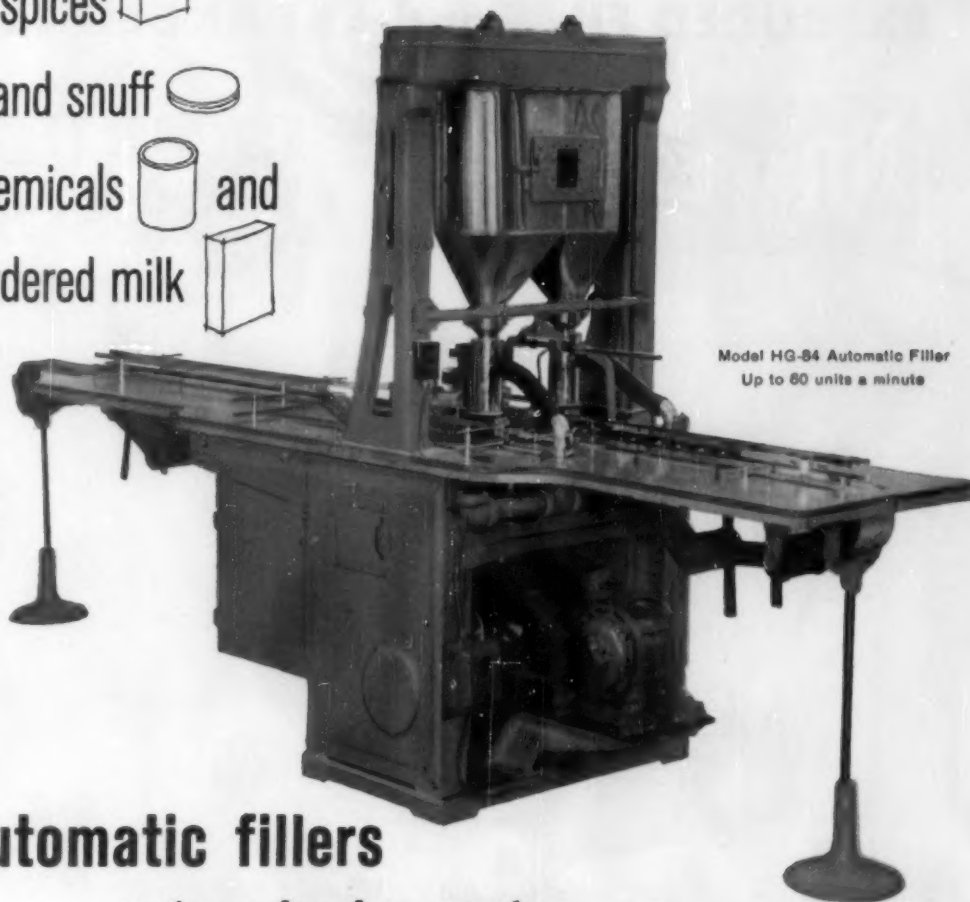
FIBREBOARD

Paper Products Corporation
Head office: San Francisco

Service offices, West: Billings, Boise, Denver, Fresno, Los Angeles, Missoula, Oakland, Omaha, Phoenix, Portland, Sacramento, Salem, Salinas, Salt Lake City, San Diego, San Francisco, San Jose, Seattle, Stockton, Yakima.

East: Allentown, Baltimore, Chicago, Lancaster, New York, Philadelphia, Salisbury.

from spices 
 and snuff 
 to chemicals  and
 powdered milk 



Model HG-84 Automatic Filler
Up to 60 units a minute

S&S Automatic fillers cut packaging costs of "hard-to-handle" products!

If your product is a sticky or dusty powder, hard-to-handle flakes or granules . . . if you package in cans, jars, boxes or cartons . . . if you want filling accuracy of plus or minus 1% for most products . . . then you can reduce your packaging costs with the versatile Stokes & Smith line of automatic high speed fillers.

Three different filling methods are available, depending on the characteristics of your product . . . volumetric set-time, gross weighing or combination auger-vacuum. Each method delivers accurate fill automatically through a controlled auger feed. Changeover from one product or package size to another is quick and simple. Container size ranges from 1 1/2" to 6" wide, 1 1/2" to 4" thick, 1 1/2" to 8" high.

Multiple-station tandem fillers are also available for speeds of up to 145 units per minute. All models require only one attendant to feed.

A few of the many companies who have purchased S&S high speed automatic fillers

American Stores Company
 Avon Products, Inc.
 The Borden Company
 Coty, Inc.
 E. I. duPont
 Durkee Famous Foods, Inc.
 Albert Ehlers, Inc.
 R. T. French, Inc.
 The Fyr-Fyter Company
 General Foods Corporation
 Johnson & Johnson, Inc.
 Lederle Laboratories Div.
 J. Martinson & Company
 Wm. Montgomery Company
 Pet Milk Company
 Rexall Drug Company
 Stanley Home Products
 U. S. Tobacco Company
 White House Milk Company



For complete specifications and details, write to:

FMC PACKAGING MACHINERY DIVISION

Stokes and Smith Company

4904-U SUMMERDALE AVE.
PHILADELPHIA 24, PA.

Fast, accurate production of

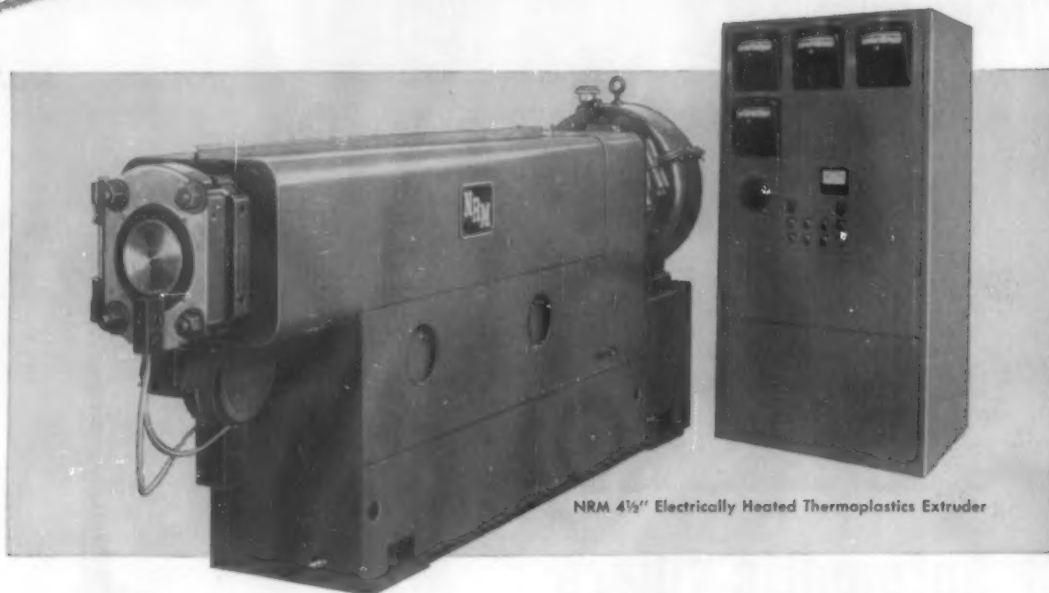
EXTRUDED FILM and EXPANDED TUBING

with



thermoplastics

EXTRUDERS and ACCESSORIES



NRM 4½" Electrically Heated Thermoplastics Extruder

NRM offers the packaging industry a full line of plastics Extruders with matching die and haul-off accessories for high production of top quality, dimensionally accurate flat film and thin-wall tubing. Standard Extruder sizes range from 1" and 1½" for experimental and light production work, to our big 15" models for high capacity requirements. Extruders may be electric, oil or steam heated, with choice of screw types specifically designed for the work.

Whatever your requirements, for extruders only, or for entire installations, NRM has the Extruder or the complete unit in the right type and size to fit naturally into your setup and reduce packaging costs through economical, *trouble-free* operation.

Check our plastics engineers today. The same technology which has given the plastics industry the most significant advancements in extruder design is also available to assist you in the installation and *profitable* operation of NRM Extruders.

WRITE FOR MORE DETAILS, OR TO ARRANGE A DEMONSTRATION

NATIONAL RUBBER MACHINERY COMPANY



General Offices and Engineering Laboratories: 47 West Exchange St., Akron 8, Ohio

EASTERN PLANT: 384 Getty Ave., Clifton, N. J.

SOUTH: The Robertson Company, Rutland Building, Decatur, Ga.

WEST: S. M. Kipp, Box 441, Pasadena 18, Cal.

MID-WEST: National Rubber Machinery Company, 5875 N. Lincoln Ave., Chicago 45, Ill.

CANADIAN: F. F. Barber Machinery, Ltd., 187 Fleet St., West, Toronto, Ont.

EXPORT: Omni Products Corporation, 460 Fourth Ave., New York, N. Y.

*Creative
Engineering*

Precision
**POLYETHYLENE
 CONTAINERS**
 LIGHTWEIGHT-UNBREAKABLE

STOCK SHAPES

Natural Color
 Immediate Delivery

●
COLOR MATCHES

IMPRINTING

DECORATING

ON REQUEST
 ●

**CHOICE OF CLOSURES,
 DISPENSERS AND
 OTHER ACCESSORIES**

Progress
 WITH
Precision



BOSTON ROUND
No. 408 & 476
 1 oz. 2 oz. 4 oz. 6 oz.
 8 oz. 12 oz. 16 oz. 32 oz.



OBLONG
No. 403
 3 oz.



OVAL
No. 470
 $\frac{1}{4}$ oz. $1\frac{1}{4}$ oz. 2 oz.
 3 oz. 4 oz. 8 oz. 16 oz.



PRISM CYLINDER
No. 410
 2 oz. 4 oz. 6 oz.
 8 oz. 12 oz.



TAPERED ROUND
No. 430
 2 oz. 4 oz. 5 oz.
 6 oz. 8 oz.



STRAIGHT CYLINDER
No. 438
 5 oz.



**RIGID HI-TEMPERATURE
 WIDE MOUTH • No. 450**
 1 oz. 2 oz. 4 oz. 6 oz.
 8 oz. 16 oz. 32 oz.

**PRECISION
 EXTRUDERS**

DIVISION OF

LAMEX

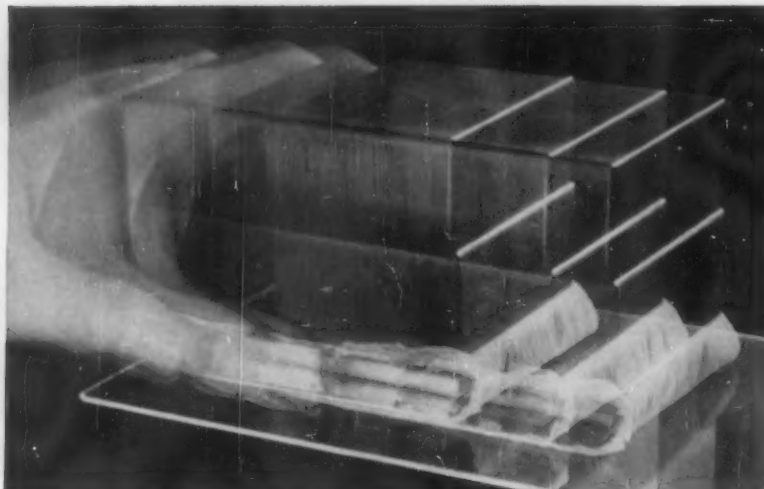
CHEMICAL CORP.

MANCHESTER, N. H.

SALES HEADQUARTERS,
 100 WEST 34TH ST., N. Y. 1
 TEL. 3-8000 (4 lines)

**MATERIAL "**

A 5" by 8" sample of cushioning material "X" is wrapped around the scratch block. Note the dial reading of the micro-threaded needle.

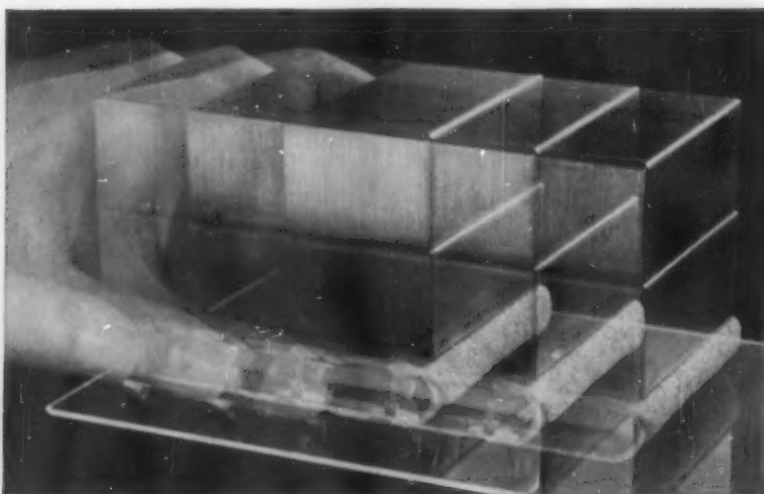


The test block has been placed on a sheet of clear plexiglass. Metal weights have been applied to the top of the test block to simulate load. The test block is now gently pushed across the plexiglass sheet.

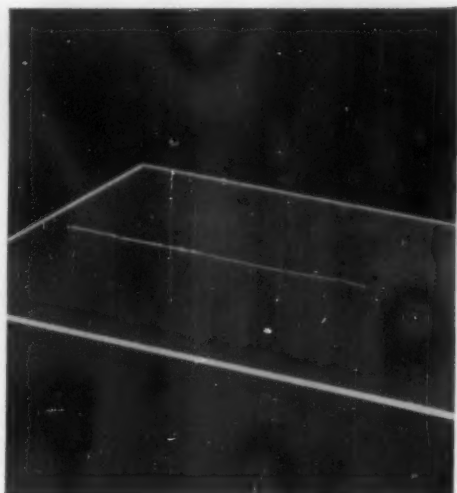
"SCRATCH TEST" SHOWS GIVES YOUR PRODUCT

**KIMPAK**

A 5" by 8" sample of Kimpak of equal thickness to Material "X" is wrapped around the scratch test block. The needle setting remains as above.



The same weights are applied to the top of the test block as in the above test and forward motion is applied. Note in either test there is no downward pressure other than the given weights.



The weights and test block are removed. The plexiglass sheet clearly shows damage to the surface. The scratch needle has broken through the surface-protecting material.



The "scratch test" shows the effect of a protruding point breaking through cushioning material. An adjustable needle protrudes from the underside of a plexiglass test block. The block is wrapped in cushioning material and weights are applied to simulate load. When moved across the surface of a plexiglass sheet, a scratch appears on the sheet if the cushioning material does not provide sufficient protection.

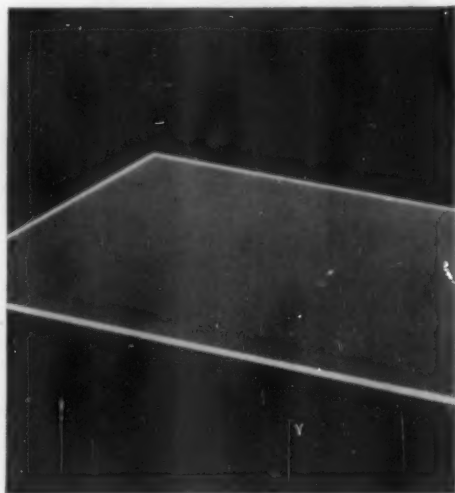
NAILS, rough spots in wood, corrugated fiberboard or other coarse packaging materials can break through inadequate surface protecting material and result in concentration of load on a small point or area with damaging results.

The surface-protecting cushion you select must have the necessary thickness under load to distribute the load evenly over the entire surface area and prevent such a break-through.

Call Kimberly-Clark today for a Kimpak packaging engineer to see you. He'll help you with your packaging problems and demonstrate the "scratch test" with Kimpak and any other cushioning material you select.

WHY KIMPAK* INTERIOR PACKAGING

BETTER SURFACE PROTECTION



After weights and test block are removed, the plexiglass sheet is shown to be undamaged. Lack of scratch marks reveal superior surface protection with Kimpak.

FREE—Check the effective thickness of your cushioning material



The *effective thickness* of a cushioning material is its thickness under a standard load. Here's how you can check the effective thickness of the cushioning material you are now using. It's easy with this precision-made, aluminum standard weight which applies the 3½ pound per square foot load required by Federal Specification. This weight is *free* to all packaging engineers and cushioning buyers. Just ask the Kimberly-Clark representative who calls on you or write Kimberly-Clark, Dept. M-77, Neenah, Wisconsin.

Kimberly Clark
INTERIOR PACKAGING
KIMPAK*

*T. M. REG. U. S. PAT. OFF.

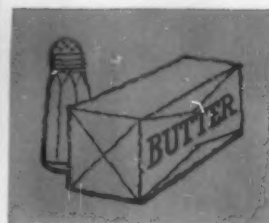
Kimberly-Clark Corporation • Neenah, Wisconsin



Alkali and Mold Resistant



Withstands Cold



Resists Grease and Salt



Prevents Dryness

Keep quality under control with Cochran Foil



Non-Crazing



Moisture Repellent

To guarantee *lasting* quality, more and more leading manufacturers are turning to *Cochran Controlled Protection*. They know that Cochran's twenty years of experience assure them quality foil—proper papers and boards—proper adhesives—the right coatings—to withstand all the conditions of transport and storage.

They know that with Cochran Controlled Protection quality products *remain* quality products throughout their journey to the consumer's hands.

Find out today what Cochran Controlled Protection can mean to your products.

Write for booklet "MEET COCHRAN FOIL,"
Dept. F-7, 1430 South 13th Street, Louisville 10, Ky.



Heat Resistant



Chemical Resistant

Cochran FOIL COMPANY
Incorporated

PLAIN, LAMINATED, COLORED AND COATED FOIL FOR
PACKAGING AND INDUSTRIAL APPLICATIONS • COILED ALUMINUM SHEET

FACILITIES AS FLEXIBLE AS FOIL ITSELF

"What are we doing about uniform quality and prompt delivery of steel containers?"



"We're getting high quality from J&L ...and they have a plant near every one of ours."



- J&L steel containers provide engineered packaging for dependable transportation and safe storage.
- J&L specialists, backed up by modern research, are ready to consult on your toughest packaging problems.
- Precise fabrication and correct specification of fittings and closures.
- Prompt dependable delivery from nine plants.
- J&L, an integrated steel producer, controls container quality from start to finish.

Call your nearest J&L Container Division office for recommendations on your packaging problems. Or write direct to the Container Division, 405 Lexington Avenue, New York 17, N.Y.



Jones & Laughlin

...a great name in steel





CAPACITY

15 MILLION UNIT-PACKAGES A DAY

Ivers-Lee has the ability to turn out 15 million flexible Unit-Packages in a normal 8 hour production day. This amounts to over three and a half billion Unit-Packages a year.

When this capacity is coupled with the ability to Unit-Package such diversified products as creams, powders, liquids, tablets and capsules, you have the reason why Ivers-Lee is the foremost contract Unit-Packager in the world.

This is also the reason why your order, whether for 5 thousand or 500 million packages, receives the very best of attention and service . . . besides being packaged in the finest of all possible Unit-Packages.



Ivers-Lee is the creator and Contract Packager of Super-Sealtite, the Catchcover, the Tab Pak and a thousand and one other unusual packages for sampling and distributing single or multiple doses of tablets, capsules, powders, creams and liquid Drogettes.

All Lemons Don't Grow on Trees!



From the versatile production facilities of Royal Manufacturing Company comes one of the largest lemon "crops" in this citrus-growing state of Arizona.

These plastic container-dispensers for concentrated lemon juice, so convenient for use in preparing foods and beverages, are exact replicas in accurate natural color. Their ever-widening demand attests to Royal's quality production.

Here is another example of how sales appeal and consumer acceptance can be greatly enhanced by a Royal Container of Distinction.

Perhaps you have a product that can be *better made by Royal* of modern plastic. We sincerely invite your inquiry.

Bottles from stock molds (1/4 oz. to 32 oz.) are stocked by these distributors:

LOS ANGELES

Berri-Ecklund Associates
4726 Melrose Ave.

PATERSON, N. J.

Modern Decorating Co.
155 Oxford St.

MIAMI, FLA.

Magic City Bottle & Supply Co.
1380 N. W. 23rd St.

SAN FRANCISCO

Marketing Agents, Ltd.
207 Powell St.

CHICAGO

Berman Bros., Inc.
1501 S. Laflin St.

MONTREAL

Browns Bottle & Supplies, Inc.
1655 Des Carrières St.

Royal designs and produces containers for leading manufacturers throughout the nation and has complete facilities to produce private mold designs at surprisingly low cost.


Royal

Royal containers are made under U. S. Patent No. 2,750,624



ROYAL MANUFACTURING COMPANY, INC. PRESCOTT, ARIZONA



**SEALED CARTON
PRESERVES FRESHNESS**

Krug's cuts cost 40% ...doubles packaging production with end loading **CECO**® cartoners

PACKAGING PRODUCTION DOUBLED —Krug's, one of New York's leading bakeries, reports that they have increased their packaging production by 100% while at the same time reducing their labor costs by 40%. For example, as shown in the photos above, with one girl loading and another unloading, they package 32 delicate cakes a minute. With a changeover that takes but a few minutes to make, the same loading operator could load 70 pies a minute. That's production!

30% CARTON SAVINGS —Along with the increase in production, the switch to end-loading CECO Model 40 Cartoners has enabled Krug's to use folding cartons at a saving of 30% in carton costs, and additional

savings in warehousing costs. These savings alone pay for the CECO Cartoners in a short time.

EXTRA VALUE TOO —This change to folding cartons has given Krug's products an extra plus too, because unlike old-style two-piece cartons, their one-piece cartons are sealed—sealing in the freshness that the consumer appreciates.

The list of bakeries using the CECO Model 40 Carton-er is long, including Wagner, Drake, Fischer, Dugan, Blue Bird, Bradley Pie, Table Talk, Horn & Hardart, and many others. Find out how you can slash production costs. Write for brochure today.



CONTAINER EQUIPMENT CORPORATION

MEMBER, PACKAGING MACHINERY MANUFACTURERS INSTITUTE

78-88 LOCUST AVENUE, BLOOMFIELD 3, N. J.

Imagination

**AN INTEGRAL PART OF THE CONTAINER
WHEN MARYLAND GLASS TAKES
OVER YOUR DESIGN PROBLEM!**

When you drop a packaging problem in our lap, the end result is more than a glass container. It is an *idea* . . . born of restless imagination, shaped by skilled hands, backed by years of sound experience. Our creative staff gives you a selling package that packs well, ships well and pushes your product on the shelf. For a successful solution to your design problem, contact MARYLAND GLASS CORPORATION, 2147-53 Wicomico St., Baltimore 30, Md.



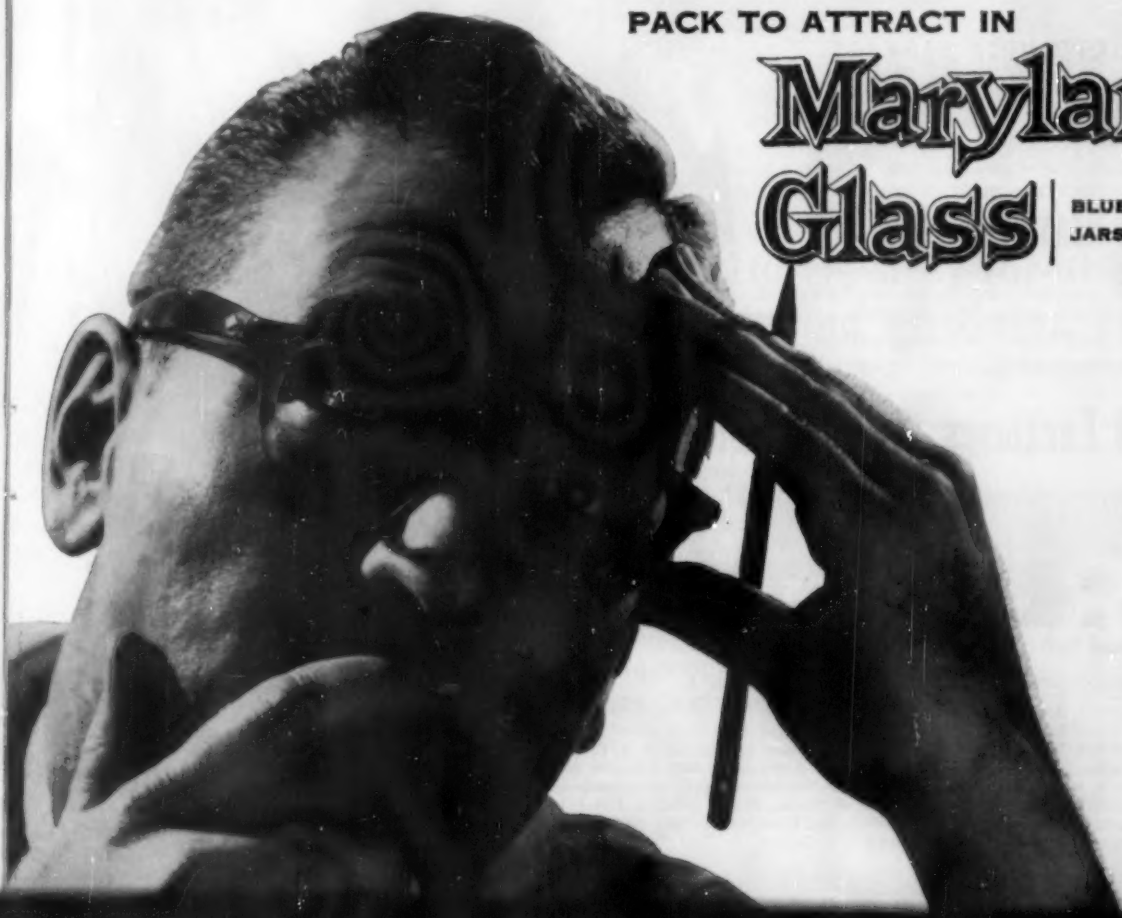
STOCK DESIGNS

—A variety in blue or flint glass and a complete range of sizes is ready for immediate shipment.

PACK TO ATTRACT IN

Maryland Glass

**BLUE OR FLINT
JARS AND BOTTLES**



the Perfect Package

For a Fine Product

CONVULUTELY-WOUND

R·C·

**Metal End
FIBRE
CANS**



A STRONGER PACKAGE

Wilt and sag proof! This convolutely-wound fibre container makes a stronger package with built-in durability to resist wet hands in the kitchen and bathroom—right down to the last sift!

A NEATER PACKAGE

Your label has its best appearance on an R. C. convolutely-wound can because it is applied dry, without gum. The adhesive is on the body of the fibre can. No moisture will affect its appearance, giving the product top shelf appeal.

4 Factories to Serve You

R·C· CAN COMPANY

MAIN OFFICE and Factory 9430 Page Blvd., St. Louis 14, Mo.

Branch Factories: Arlington, Tex.; Rittman, O.; Turner, Kans.



SALES OFFICES: C. E. DOBSON, 1003 Carondelet Bldg., New Orleans 12, La. R. C. CAN CO., 225 West 34th St., New York, N. Y. L. C. MORRIS CO., P. O. Box 8042 Sta. F., 1156 Dalon Dr., N.E., Atlanta 6, Ga. S. W. SCOTT & SON, 608 McCall Bldg., Memphis 3, Tenn. W. L. BENNETT, 126 S. Third St., Minneapolis 1, Minn. CAN SUPPLY CO., 1006 W. Washington Blvd., Los Angeles 15, Calif. JOSEPH ROVIN, R. C. CAN CO., 4805 West Chicago Avenue, Chicago 51, Ill. PALMER SUPPLIES CO., of Florida, Palmer Building, 209-211 E. Robinson, Orlando, Florida. R. C. CAN COMPANY, 12530 Yukon, Hawthorne, California. J. H. MACKENSEN, Bay Pines Trailer Park, 10005 Bay Pines Blvd., St. Petersburg, Florida. ALLIED CAN & CONTAINER CO., 9 Sandsburg Ave., Carnegie, Pennsylvania.

"Stop-Slip" Sprayed Shipping Cases Answer Dual Problem Of "In-Plant" Handling and "Over-the-Road" Shipments



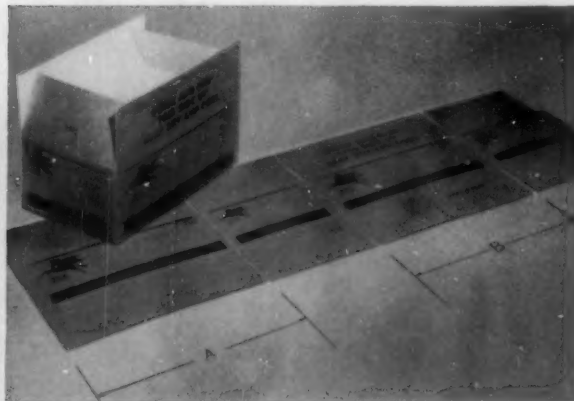
HANDLING TEST "A". Operator has braked sharply at 5 mph down a 5% grade. Treated cases did not move more than 3 inches.



APPLICATION of Paisley "Stop-Slip" Spray Coating being done at the container plant as corrugated blank reaches discharge belt of printer-slotter.



HANDLING TEST "B". same as "A". of the identical load of untreated cases, nine boxes were thrown to the dock.



SPRAY PATTERN of Paisley "Stop-Slip" invisible Coating covers only sections "A" and "B". Material may be applied directly over wet ink on the corrugated blank without adverse effect.

Can Be Applied By Fibre Box Manufacturers or By The Shipper.. Eliminates Need of Strapping, Banding or Gluing Pallets

A quick, easy, automatic application of Paisley "Stop-Slip" sprayed Coating #1715 can be applied by the case manufacturer at the printer-slotter, or by the shipper at the end of his automatic case sealer. This instant-drying treatment materially reduces in-plant handling and shipping damages, which have resulted from the normal poor dynamic stability of untreated containers.

Paisley "Stop-Slip" not only reduces damage in handling; but, enables you to use a highly finished corru-

gated board for better printing; without increased stacking and shipping problems.

This light, invisible, economical Coating effectively reduces natural container slipperiness without harming its appearance.

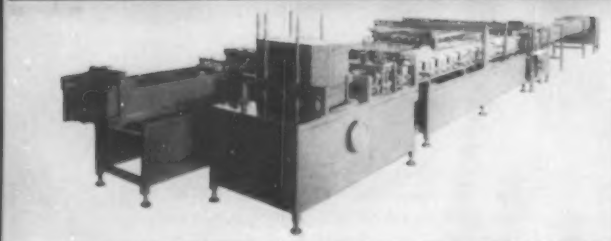
Every corrugated box manufacturer and shipper should investigate the advantages of the Paisley "Stop-Slip" treatment. Phone or write today for technical information and assistance.



PAISLEY PRODUCTS INC. A MORNINGSTAR, NICOL, INC. SUBSIDIARY

630 W. 51st Street, New York 19, N.Y. • 1770 Concord Ave., Chicago 16, Illinois.
Headquarters for Glues, Pastes, Resin Emulsions, Latex Cements & Related Chemical Products
for all Packaging, Labeling and Industrial Manufacturing Operations. Plants: New York •
Chicago • St. Louis • Los Angeles • San Francisco. Offices in all principal cities.
In Canada: Morningstar-Paisley of Canada, Ltd., Toronto.

"Old Fashioned"
in handling
your corrugated
cases?



Packomatic
T.M. Reg. U. S. Pat. Off.

equipment feeds, forms, positions, loads, seals,
and imprints shipping containers automatically

PACKOMATIC GALLON-CAN CASE LOADER

Packomatics high-speed, continuous-motion case forming, feeding, loading and sealing machine, shown above, oiled the way at the Esso Standard Oil Company plant for faster fully-automatic casing of gallon cans. This is the only machine on the market designed for cost-reducing end-loading style corrugated shipping containers. Custom-Engineered to accommodate cans from the 12 oz. size to the 5-gal. Imperial gallon size, for an almost endless variety of products—from foods, juices and beer to paint, chemicals and cleansers.

J. L. FERGUSON CO. Joliet 3, Ill.

New York, Chicago, Cleveland, Boston, Tampa, Baltimore, Portland, Denver, Los Angeles, San Francisco, Seattle, New Orleans, Louisville, Kansas City and All Principal Canadian Cities.

PACKOMATIC machines include the Bale Sealer — Case Sealers — Opener-Loaders — Case Imprinters — Telescoping Volumetric Filler — Packer-Glueers. Units available, semi-automatic or fully-automatic depending on your needs.

Just stack the magazines with "knocked-down" containers. The rest is automatic. With Packomatic Custom-Engineered equipment, containers are fed out, formed and positioned, end-loaded with cartons or cans, sealed and imprinted 4-sides (serial numbered, if desired) ready for shipment. Packomatics do the whole job—or any part of it. And how they pay off in any plant! End-loaded cases require up to 28% less board. Labor costs shrink dramatically and your packaging line keeps pace with your production line. Your Packomatic line can grow as you grow, too. Start now with a case opener and loader, or case sealer, or imprinter—build it unit by unit into a complete system.



Six 6-qt. cans or gallon cans
in 20 1/2" x 13 1/2" x 9 1/2" case
and 20 1/4" x 13 1/2" x 8 1/2" case



Twelve 46 oz. cans
in 21" x 13" x 7 1/2" case



Twenty-four cartons
in 19 1/2" x 10 1/2" x 8 1/2" case



Eighteen 7 & 8 oz. cartons
in 30" x 14 1/2" x 8 1/2" case



Sixty cigarette cartons
King Size: 17 1/2" x 11 1/2" x 22"
Regular: 14 1/2" x 11 1/2" x 22"

TYPICAL CASE LOADING PATTERNS FOR CANS AND CARTONS



Twenty-four 12 oz. cans
in 14 1/2" x 10 1/2" x 7 1/2" case



Six No. 10 cans
in 22 1/2" x 17 1/2" x 7 1/2" case



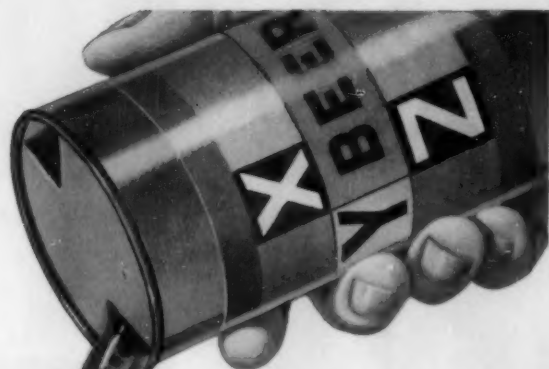
Thirty 1 lb. cartons
in 16 1/2" x 10 1/2" x 7 1/2" case



Twenty-four cartons
in 19 1/2" x 10 1/2" x 7" case



Forty-eight cartons
in 22 1/2" x 23 1/2" x 15 1/2" case



REFINEMENTS OF GOOD JUDGEMENT

A product
of universal
appeal . . .

packed and
safely shipped
to market
in sturdy
corrugated
cases
made
by



GROWERS CONTAINER CORPORATION

PLANTS IN SALINAS AND FULLERTON, CALIFORNIA AND JACKSONVILLE, FLORIDA



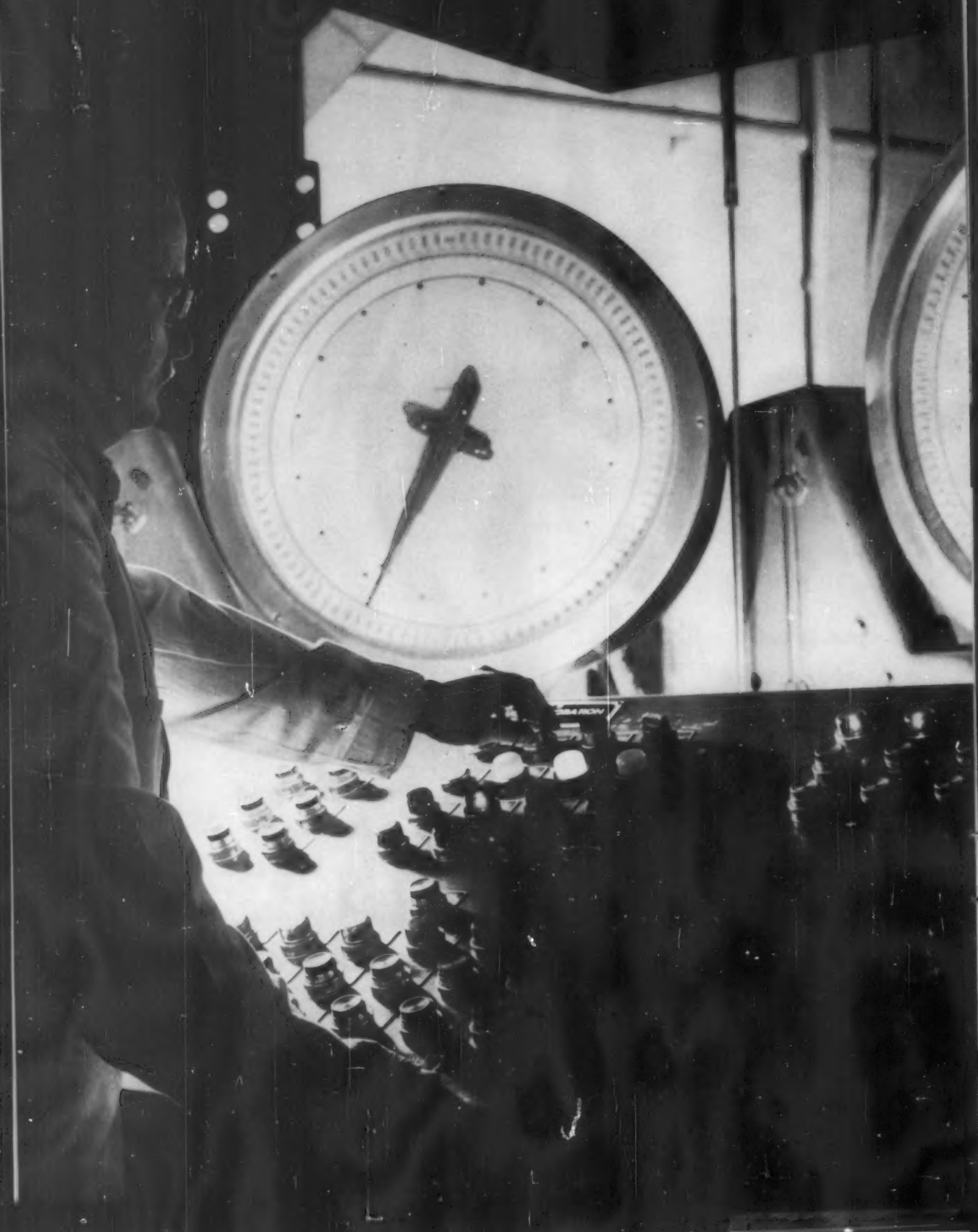
HEADQUARTERS in
SALINAS, CALIFORNIA • SALES OFFICES — CALIFORNIA: Salinas, Fullerton, San Francisco, Los Angeles, Santa Rosa, San Jose, El Centro, Fresno • ILLINOIS: Chicago
FLORIDA: Jacksonville, Orlando, Tampa, Lake Wales, Miami Springs • ARIZONA: Phoenix • ALABAMA: Birmingham • SOUTH CAROLINA: Greenville • GEORGIA: Atlanta

Twenty-four 15 oz. cans
in 16 1/2" x 10 1/2" x 7/16" case

in 22 1/16" x 17 3/8" x 7/16" case

in 16 1/8" x 10 1/16" x 7/4" case

in 17 1/2" x 10 1/2" x 7/4" case



this electronic marvel

helps put quality glass containers
on your filling line

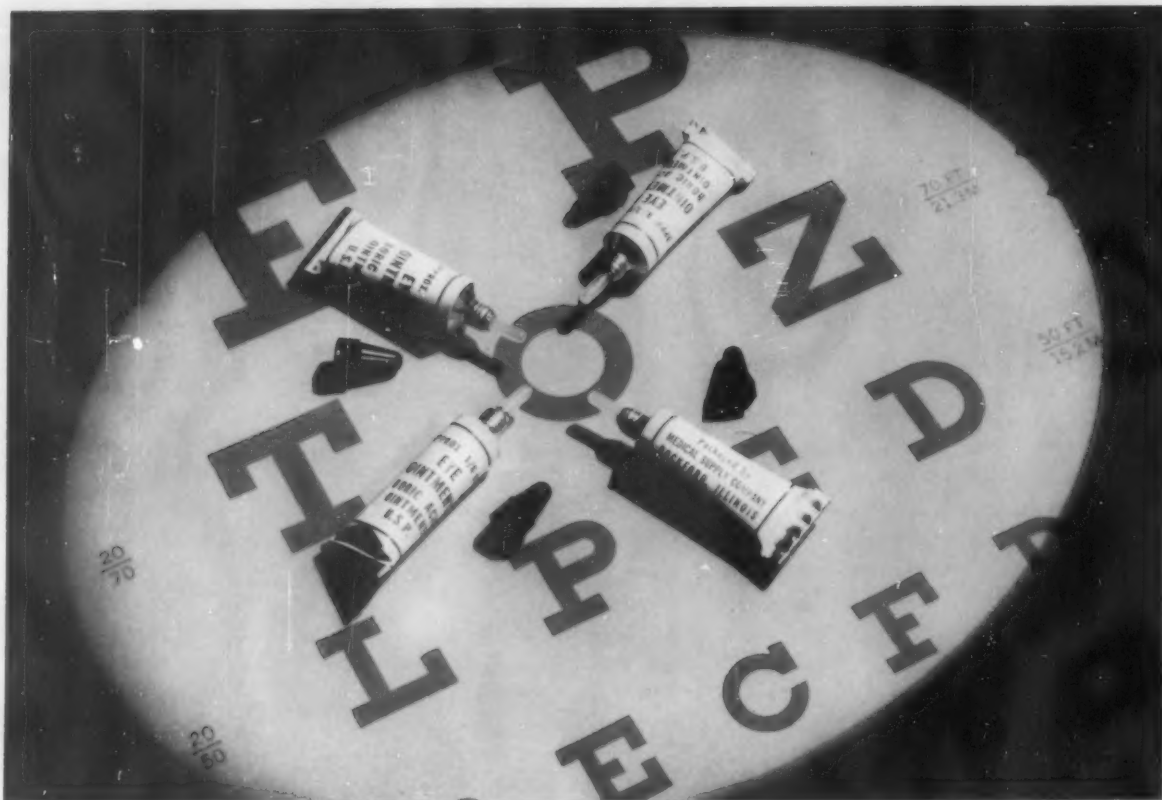
Pictured on the opposite page is the control panel for the automatic weighing of the raw materials which eventually emerge as Ball Glass Containers—containers you can rely on for top performance on your filling line. Built to Ball specifications, and called the "Batchmaster," this electronically operated device is the last word in equipment of its type designed for the glass industry. It controls the precise quantity of each proper material as it enters every batch for mixing. Automatic Weighing is just one of many fully automatic quality controls in the ultramodern Ball plants. The integrated combination of knowledge gained from years of experience, research, ingenuity, and automation, constantly is being applied to keep the Ball product unsurpassed for quality in the glass container field.

Call Ball first for glass containers and metal closures to glamorize your product—protect its quality. Whether your requirements call for stock items or private molds, for plain or decorated closures, Ball Packaging Counselors will assist you in developing the package which will best fit your needs. Get in touch with your nearest Ball representative.



for the finest Glass Containers / Metal Closures /
Complete Packaging Counsel

BALL BROTHERS COMPANY, INC., Muncie, Indiana; Okmulgee, Oklahoma;
El Monte, California. Represented in major cities throughout the United States.



Safe . . . New Polyethylene Eye Tip Tubes *by Wheeling*

Smooth . . . soft . . . no rough edges to endanger the eyes—these are some of the many, many advantages of this wonderful new Plastic Eye Tip Tube *by Wheeling*. It combines perfectly a metal tube and polyethylene eye tip for ointments or for any products used in or near the eyes. The smooth texture of the molded plastic tip assures a smooth surface always.

These Polyethylene Eye Tip Tubes are now in production, and are being used by Medical Supply Company of Rockford, Illinois, and others. This is another example of packaging progress accomplished by *Wheeling* packaging specialists.

*Design Patents Applied For

WHEELING STAMPING CO. WHEELING, W. VA.

Consult Your Classified 'Phone Directory for Sales and Service in These Leading Cities:

New York • Boston • Philadelphia • Chicago • Cleveland • Cincinnati • St. Louis • Minneapolis • Los Angeles
• Aluminum, Tin and Lead Collapsible Tubes • Molded Caps for Tubes and Bottles • Plastics Specialties

Have you tried
BEER with dinner?
It's Great!



A carton fit for a KING!

Make a Gardner carton the crowning touch to a fine product. An inviting picture, like the one above, is faithfully reproduced by Gardner multi-color gravure or lithography to give your package sales appeal. This Budweiser six-pack has short end flaps for easy cooling and carton economy. Its convenient folding handle makes it easy to stack, easy to carry and easy to buy. Your Gardner representative will be glad to arrange a meeting at your convenience.



Many of America's great products reach the consumer in "Cartons by Gardner"

THE GARDNER BOARD AND CARTON CO.



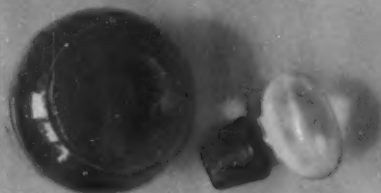
Middletown, Ohio

Manufacturers of Folding Cartons and Boxboards

PAPER NEEDS THE "TOUCH OF TALENT"

Seventeenth century papers used by the Dutch were generally handmade from flax or "rags." Far too much of a luxury for wrapping purposes, still, they needed the touch of talent to become priceless.

Add the genius of Rembrandt to rag paper, and you have a seventeenth century etching any art lover would covet. It is this same principle Nashua uses to create unique, compelling packaging from paper.

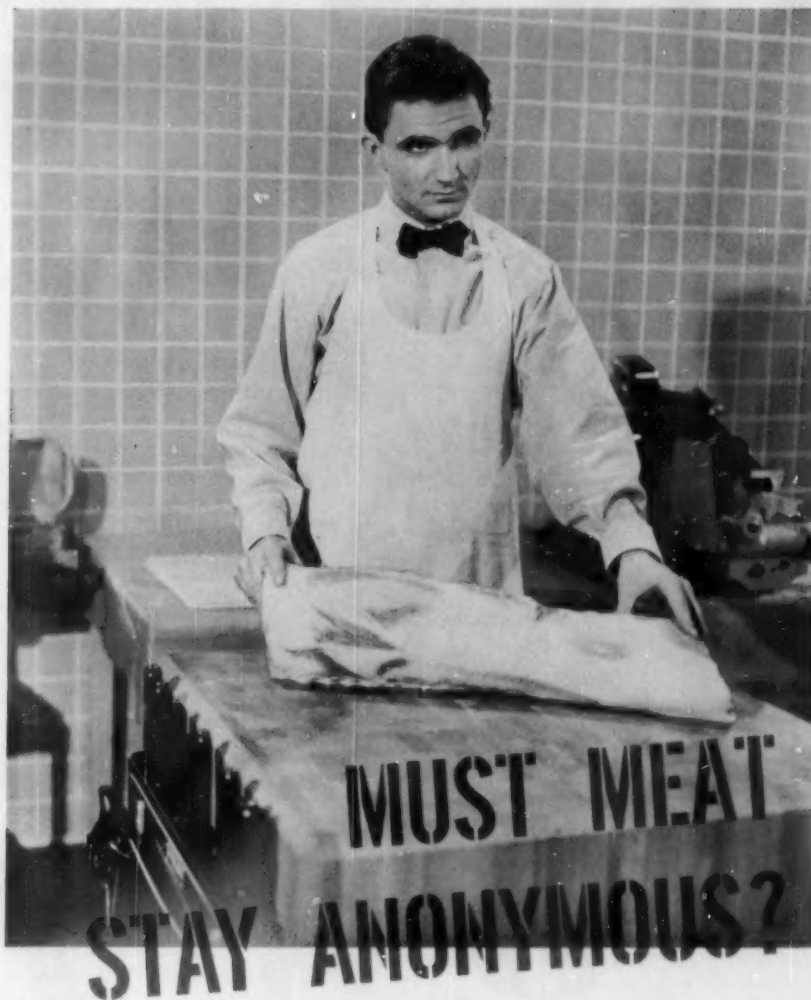


Skill and talent are the priceless ingredients of a collector's item—be the collector a museum curator, or a housewife buying an irresistibly packaged product.

NASHUA PACKAGING TALENTS AVAILABLE TO YOU... Creative Design • Paper Chemistry •
Package Engineering • Coordinated Packaging • Quality Production • Procurement Versatility

NASHUA
Corporation





*This may be packaging's
biggest opportunity and challenge:
Less than 8% of
28-billion-lb. annual meat production
now carries packer's identity
to consumer via a package*

Packaging remains a supermarket responsibility in only two departments—the fresh produce section and the meat counter. Packaging of produce is slowly but surely moving back to the grower's level, wherever possible. But packaging at the great meat-packing plants stands just about where it did 50 years ago: Virtually all non-processed fresh meats, which constitute more than 92% of the industry's production, still move out of packers' hands without packaged brand identity.

Can the meat packer afford to stand aside and rest



Packer's packaging of cured and processed meats is distinguished. But these types of meats satisfy only 8% of America's appetite.

the ultimate quality of his product on sometimes-indifferent retailer pre-packaging? Doesn't he care about promoting his own name and reputation—and if so, what can he do about it? What's the future of packaging at the meat-packer's plant?

The packer's profit margin is small, less than a cent per dollar. He is constantly looking for any innovations that will nourish his sick profit picture. Most packers frankly don't look to packaging as the single or ultimate answer to their woes. Packaging advances must be tied closely to preservation methods, since fresh red meats are extremely perishable. However, even conservative spokesmen in the meat industry acknowledge that packaging can and must play an important role in its industry's future.

Obviously, packer-packaged red meats would give

Frozen fresh meats of the basic steak and chop type have been disappointing in volume so far, despite excellent packaging and heavy promotion by big packers like Armour and Swift. One problem is cost and lack of clear-cut advantage to consumer; another is matching meats uniformly to the printed illustration on the package.



the packer brand identity at the consumer level and, supported by extensive advertising campaigns, could help improve volume and profit.

Today's unbranded fresh meats may be America's most anonymous products. Certainly they represent one of the biggest unconquered territories for packaging. With total meat production reaching an all-time high of 28 billion pounds in 1956 for a record-breaking per capita consumption of 166.8 lbs., unidentified meat is a deplorable situation from the packer's viewpoint. And an estimated 22.8 billion of those 28 billion pounds in 1956 were fresh meats, totally lacking, so far as consumer packaging is concerned, in identification of their source.

This is an industry almost as big as all of packaging. The retail value of 1956 meat production is estimated at \$13.6 billion. But how, the packers ask, can we package fresh meat more economically and better than the retailer? And, many retailers prefer to buy meat from one or more packers and sell it under the store's name. Desire for private-labeled meats on the part of some chains may be just one of several hurdles the packer must clear before making a final dash for nationally branded fresh meat.

Of the two basic types of meats, fresh and processed, there has never been any hesitation among packers about packaging the processed types—hams, sausages, luncheon meats, the canned and frozen items. They do a good packaging job on these products. Interestingly, these packaged items are more profitable, pound for pound, than fresh meats. But they make up less than 8% of production.

The majority of cured meats are packaged by an intermediate packer (often a specialized "sausage house"), who does no slaughtering of his own, or by a chain store. For years packers have put hams, sausages, luncheon meats and other cured products in cans, flexible wraps, jars and cartons. Such current arguments as vacuum bags vs. overwraps are on *how* to package, not *why*.

It is probable that all cured meats some day will be packaged. This trend will be governed by an important reservation: Most packers regard packaging costs as too high.

Packaging of fresh red meats is another matter. The product has inherent characteristics posing unique problems which have so far prevented extensive pre-packaging at the packer's level.

Meat packing has always been a bulk industry, dealing in thousands of animals to produce tons of product. The packer always starts with a large unit and reduces it to smaller units, incurring about a 15% loss in bone and fat.

Meat is never better, from a marketing standpoint, than the day it is prepared by the packer. Shrinkage and spoilage begin to set in immediately after cut-

ting, so that there is a constant race against time to sell a cut of meat at acceptable quality. Fresh red meat needs oxygen to support appetizing color, yet oxygen leads to product breakdown and spoilage. To date, no packaging has been found that will really solve this dilemma.

The packer and retailer would certainly approve of packages that would extend shelf life of fresh red meat more than today's average of 48 hours. More time *must* be had if there is to be centralized packaging and distribution to retail outlets. That is the crux of the packaging problem.

Some meat men believe the answer is to distribute and sell meat faster—not keep it longer.

the 50th anniversary of the American Meat Institute, Harvey McNamara, president of the National Tea Co., told packers that in the next 10 years 90% of all meat sold to retail stores will be frozen meat. Today it amounts to not much more than 1 or 2%, and most packers figure that 15% is the likely maximum.

Of the 28 billion pounds of meat produced in 1956, only an estimated 325 million pounds were in frozen consumer packages—and the bulk of that was in the older, cooked or semi-prepared specialty items (like buttered hamburgers and breaded chops) rather than in basic raw-meat cuts. To achieve just a 10% level the industry would have to freeze in terms

PHOTOS COURTESY NORTH AMERICAN CAR CORP.



One hope is a system of refrigerated carriers for pre-packaged meats straight through from packer's plant to retail stores in distant cities. Hormel is testing these mobile reefers, which are conveyor loaded at the plant with orders made up for specific retail delivery routes. Self-contained reefers are locked on railroad flat cars for shipment and transferred to truck trailers at destination for local delivery. Reefers may be regulated to handle either frozen or refrigerated fresh meats.



It is also apparent that packaging at the packer level will call for major new capital investment and in this tradition-clinging industry rapid changes are not probable.

In addition to these problems there are forces at work within and without the meat industry that are shaping its future: meat technology, Government regulations, union attitudes, and packer and retail facilities. All these will play a part in setting the speed and direction of packaging advances.

Freezing

One step the packer can take and is taking is to freeze packaged, branded meat cuts. Last fall, at

of billions of pounds of meat products, not millions.

Are frozen meats the answer? The industry does not agree. While Swift and other big operators like Armour, L. B. Darling and Rath have pushed various frozen items, others like Wilson, Morrell and Cudahy have held back.

On the plus side, frozen meats certainly give the packer a means of getting his brand identification. Some lower-grade meats can be made more attractive by processing them into such items as sandwich steaks. Packaged frozen meat offers efficiency of space; almost four times as much frozen meat can be stacked in a display case as fresh-meat packages. However, these must be zero cases, not just refrig-



Meat case of future might look like this. But these packer-packaged meats are all of the cured type, which stand up under lengthy distribution. They are a small percentage of the total.

erated—another stumbling block, since many thousands of new zero cases would have to be bought and old meat cases thrown out if all packers went completely to frozen red meats. On the other hand, with freezing, losses due to meat spoilage are eliminated.

While the nation's consumer freezer capacity is rising, frozen meat sales have not gained appreciably. The 1956 total was an anemic 0.1% increase over 1955.

One reason these products have been boomless so far is that the meat industry apparently got started on the wrong foot with its packaged frozen products. Though the industry has been freezing in bulk quantities for years (it is selling large quantities of frozen individual portions to institutions) and Birdseye experimented with consumer cuts in the 1920s, the marketing of today's frozen meats has built-in drawbacks:

► *Frozen meat is not a convenience food* from the consumer's viewpoint. Unlike frozen dinners, most frozen basic meat cuts must be thawed and therefore take as long to prepare as fresh cuts. Electronic ovens, however, could bring about a change in this picture.

► *Cost is too high.* Though packers have advertised

these meats as "no-waste" foods, the price of meat minus bone and fat is too great a shock for most housewives. The simple fact is that frozen meats are more expensive per unit purchase than equivalent family portions of bone-in fresh meats.

► *Retailer mark-up was set too high.* Packers have not attempted to work below the usual 20% mark-up

Light problem is licked with transparent pouch rotogravure printed over-all to represent and protect product within. Vacuumizing eliminates oxidation. But this won't work for fresh red meat, which must have oxygen to retain its color.



which prevails on fresh-cut meats at retail. Packaged frozen meats were promoted to dealers at the same mark-up, although all the retailer has to do is to put the package in a freezer display case. Cutting, trimming, disposal of waste and packaging—which in the case of the fresh-cut meats reduce his margin more than half—are done for him.

► *Distribution costs are already high.* Yet many rich markets like Chicago and St. Louis have not been touched due to union attitudes.

There are two other problems to overcome, though neither of these seems insurmountable:

► The frozen product at present is usually not visible. Most frozen meats have gone to a foil carton overwrap. The housewife, used to selecting her meat by visual inspection, has only a printed color vignette and the packer's reputation to guide her in choosing frozen meats. This poses risky problems. A single purchase that doesn't measure up to the picture on the box can turn a customer away from an entire brand of meats. The packer must cut and package meats of uniform quality throughout the year to conform very closely to the foil overwrap's artwork. This may be impossible on a large-quantity basis.

► New freezer facilities must be installed not only in stores, but at all levels—the packing house and throughout the distribution chain. This can be done, but not overnight. Hormel is testing mobile freezer truck units and National Tea Co. is building new stores with convertible meat display cases that can be turned into freezer cases—an interesting approach to the problem.

Opaque overwraps and boneless cuts will likely not be the final answer if frozen foods catch on in a big way. The Marhoefer Packing Co. of Muncie,

Ind., is packaging bone-in frozen pork cuts in a transparent shrinkable bag placed in a wallet-type carton. Price structure has been set at a 5-cent margin for packaging.

What else?

If not frozen meats, then what? The answer will be combined with technical preservation methods. There are several possibilities.

Irradiation? It's available now, but it doesn't provide a product that you would buy or eat. Color and taste are two qualities that have yet to be brought under control. In spite of popular consumer reports to the contrary, irradiated meats are a long way off—five or 10 years at least—and may never reach commercial application because of the taste problem.

First use could be for the military, where the consumer is captive and has no choice. While a technological break-through could suddenly make such irradiated meats practical, only one or two of the largest meat packers are spending any research dollars on this avenue.

Irradiation itself is just a processing tool. But meats so processed probably could be packaged satisfactorily in simple, flexible, transparent packages. Presuming that freshness could be maintained over a period of a couple of weeks (not for months or a year as the Armed Forces would require) without color fading, these packages would be akin to the type of overwrapped meat the housewife currently is buying. Such transparent packages would have a marketing advantage over an opaque carton for frozen meats.

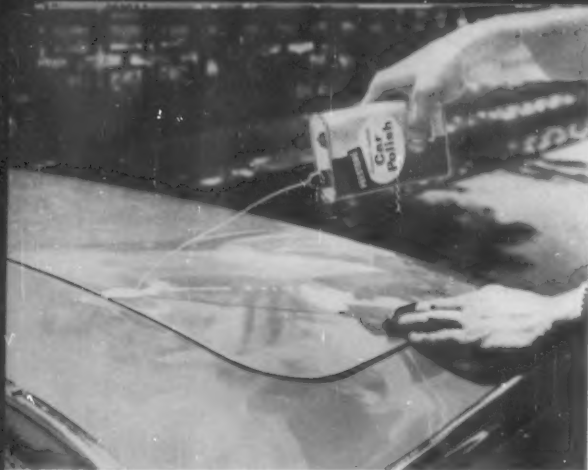
Vacuum, shrink or gas pack? Some frozen meats are using a vacuumized [Continued on page 209]

Brand identity of packer is well maintained on most sausage casings. This saran casing is deliberately printed in distortion so that it has a "normal" appearance when filled.



Convenience of pre-preparation adds appeal to breaded and cubed steaks and chops, which account for most of frozen packaged-meat market. Like most frozen-meat packages, these products of the Western Meat Co., Inc., are cartons with beautifully printed foil overwraps.





Turret top of polyethylene (borrowed from lighter-fluid field) swivels open and shut without coming off can. It makes for easy pouring of the liquid car polish, avoids waste and drip of product and eliminates the lost-cap problem.

PHOTOS COURTESY CONTINENTAL CAN CO.



Triple-seal lid (a feature of paint cans) is adapted for paste wax for maximum protection of solvent ingredients. Double-grooved lid and matching rim actually seal airtight at three surfaces.



Key-opening can (of type used for shortening) assures long life for concentrated car wash; guide strip at top assures trouble-free opening. Key is attached to recessed "oil-can" bottom.

Adopted ideas

The opportunities that exist for one industry to borrow packaging ideas from another are aptly illustrated by three functional features applied to three different types of cans adopted for a new line of "car beauty" products being marketed under the famed Prestone brand name by the National Carbon Co., division of Union Carbide Corp., New York.

The ideas came from such unrelated product fields as lighter fluid, paint and shortening.

The new packages for Prestone car polish, car wax and car wash resulted from the cooperative efforts of National Carbon and its can supplier to engineer containers which would be highly functional, more convenient to use, unique in the field, yet competitive in cost and available from standard production lines.

The polyethylene turret-seal spout, familiar on lighter-fluid cans, has been adapted for Prestone car polish, a liquid high-silicone cleaner and wax combination. The polish is packaged in a pint F-style can. The plastic turret-seal closure gives it many advantages over the screw-cap can or glass bottle in that the swivel top opens and closes with a push of the finger; polish does not clog in the screw neck; the problem of spilling or dripping is eliminated, thereby minimizing waste of polish, and there is no lost-cap problem. The turret-seal spout was tailored to the needs of the viscous car polish by enlarging the orifices in top and base for easy filling, dispensing and reclosing.

From the paint industry comes the 8-oz. triple-seal can for Prestone car wax. The lip of the cover fits into a groove in the lip of the can itself to provide an absolutely airtight closure. The triple-seal construction was adopted by National Carbon because it offers better protection against evaporation of the solvents than does the standard single friction can. The wide mouth provides easy access to the wax and the large flat center panel on the cover permits the use of the full oval of the name panel

*National Carbon picks up functional features
of cans introduced in three completely different packaging fields
to help put over three new 'car beauty' products*

on the label without diminishing it at all in size.

The 1-lb. key-opening shortening can was adopted, with minor changes, for Prestone car wash over such alternates as the fibre-body can. It offered the advantages of easy opening, a hermetic seal for product protection, simple reclosure and different proportions from packages containing competing products. The can's guide strip readily keeps the key in the groove. In order to capitalize on the sales advantage of full lithography on the top of the can, the shortening can was altered so that the key could be fastened to the bottom. This involved replacing the standard shortening-can bottom, which would not accommodate the key, with an oil-can bottom with a deep, flat contour.

In every case, the can supplier not only engineered the variations of standard can construction required to accommodate the new automotive products most efficiently, but also conducted extensive suitability tests. The final step was tooling for production and packing.

Design factors

The decision to use the well-known Prestone brand name on this new line of car beauty products came as a result of a study to determine (1) whether each product would be a specialty item and under its own brand name, or part of a family group; (2) what the marketing methods, outlets and distribution would be, and (3) what the advertising and selling plans would entail.

Although the design study analyzed over-all design potentials in five directions, the label selected offered immediate visual relationship to Prestone antifreeze and Prestone cooling-system items. It was believed that, with the [Continued on page 211]

Credits: Cans by Continental Can Co., Inc., 100 E. 42 St., New York 17. Label designs by Robert G. Neubauer, Inc., 234 Greenfield St., Bridgeport 5, Conn.

Designwise, the new products trade on familiar appearance and brand prestige of Prestone antifreeze, but with reversal of color and design scheme for distinction. Bright tinfoil shows through in diagonal stripes. Note flexibility of design for cans of varying heights.



High-speed lug cap

*Kroger tests a new twist-to-open jar closure
with a machine capable of sealing speeds
up to 140 per minute;
production barriers to convenience cap may be broken*

Good stackability is one feature of the new lug-type vacuum cap used by Kroger for its Embassy brand olives. Slight recess in cap firmly holds base of refrigerator jar stacked on top of it. Red flowed-in gasket and four lugs can be seen in upturned cap in foreground.



The housewife's preference for a glass-container cap that can be gripped in the hand and removed with a twist of the wrist is well established.* Difficulties of applying such a closure at high speed have been the chief deterrent to its use.

Of prime significance, therefore, is the fact that the Kroger Co. is currently applying to olive jars a knurled-edge, lug-type vacuum cap on a machine which has a rated speed of up to 140 a minute.

The supermarket chain is testing the new closure and machine on an 8-oz. refrigerator jar of stuffed manzanilla olives.

Early indications are that the cap offers these functional advantages:

- ▶ Its knurled edge is easy for the housewife to grip and open, even with wet hands, and suggests that the cap is a screw-off closure.
- ▶ There is little or no evidence of leakers.
- ▶ The cap appears sanitary; virtually no food or

any foreign matter collects on the interior of the cap.

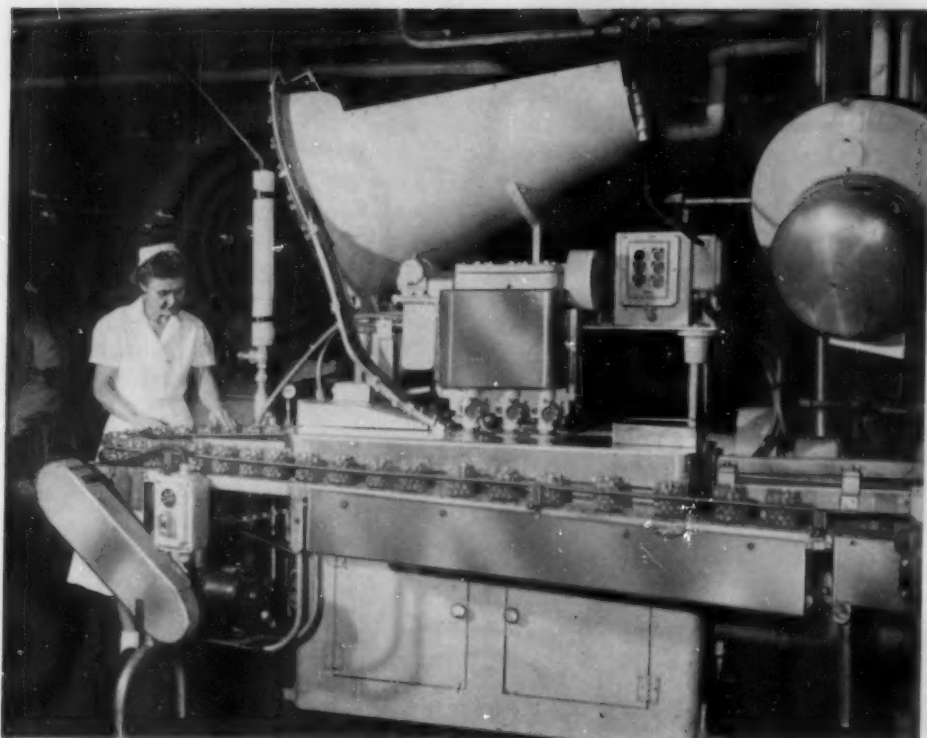
- ▶ It has good stacking features.
- ▶ The red, flowed-in gasket does not change color.
- ▶ The cap and capper produce a good vacuum seal.

Kroger decided to market test the new closure partly as a result of findings from its unique Home-maker's Reference Committee, which is run by Kroger's 26-year-old Food Foundation. This 750-member committee represents a cross section of families, according to Department of Census figures, in Kroger's 21-state marketing area.

More than a year ago Kroger blind-tested a side-seal, pry-off vacuum cap against a screw type of vacuum cap. Results of their survey indicated an over-all preference by the housewife for the screw type over the pry-off-type vacuum cap by an overwhelming 92.2%.

In addition, according to the Kroger report, housewives found the screw type of vacuum cap superior to the pry-off for product-keeping qualities.

* See "Does She Really Care?" MODERN PACKAGING, June, 1955, p. 95.



Capping machine applies lug-type cap at speeds that can run as high as 140 per minute. Filled jars move in from right on the conveyor, make a turn, pass under a pre-heater hood and pick up a cap. Hopper feed is barrel-like structure above capping machine. The cap is seated on the jar finish, cammed back on the jar lip to receive an injection of steam, reseated and then twisted shut.

While food packagers generally acknowledge that the side-seal vacuum cap is necessary for certain types of glass such as tumblers, and also for certain products which require processing in steam retorts, it is believed the majority of olive, jam and jelly vacuum packages can be handled by a screw type of closure, with high-speed capping equipment.

The cap currently being used by Kroger has a knurled skirt, an externally rolled bead, four lugs, a flowed-in red gasket and is 82 mm. in size. The cap opens with a quarter turn and the company is closing it with 35-50 lbs. of torque, though it considers 40-45 lbs. ideal. The cap manufacturer claims the cap will not "back off" in shipment or storage.

The capping machine is of a standard type, but with special fittings to adapt it to the new cap. Olives are packed into jars, the contents within the container are washed four times, brine is added and filled jars are conveyed to the capper.

Jars first pass under a hood that pre-heats the

head space and the glass finish. This prevents rapid condensation, helps to insure good gasket impression and assists in maintaining uniform vacuum levels during the production. The cap manufacturer, who also leases the capper, claims uniform vacuum levels with only 5 to 8 lbs. of steam pressure. Tests show that production runs produce vacuum variation of 2 in. of mercury.

After the pre-heater, gripper belts pick up the jar and carry it through the remainder of the capping and vacuumizing operation.

A hopper feed sends caps down a chute to the cap pick-up point located immediately after the pre-heater hood. Each jar picks up its own cap as it passes under the cap-feeding chute.

The jar then is carried past three capping chucks. The first roll pre-positions the cap on the jar before the head space is flushed with steam. This chuck rotates the cap counter-clockwise until the cap lugs can drop down between the projections on the fin-

ish. The cap seats itself. If the cap should align itself perfectly at the pick-up point, the alignment chuck will not touch the cap since its bottom half is undercut so that it will not engage the cap.

Between the first and second capping chucks are a steam-injection nozzle and a cap-tipping block. The steam injection nozzle drops down behind the jar to flush the exposed head space with steam. The cap is then cammed back onto the jar and a tightening chuck quickly seals the jar to lock in the vacuum. A third roll can further tighten the cap, if this is desirable.

The capping chucks are all spring loaded and can be adjusted and locked into position to give the desired torque-on value. Because of the fast cap-tilting and steam-injection operation, no vacuum chamber is needed on the machine. The capper is equipped with an exhaust system which is designed to take off excess steam and to reduce the moisture-

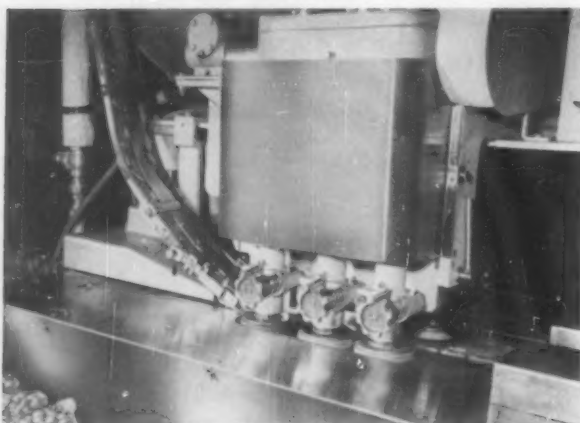
content level of the surrounding packaging area.

The machine also can be equipped with a press-on vacuum-cap attachment, although Kroger is not using this device in its test-market operation.

Kroger is running its 8-oz. jar at present at about 86 or 88 a minute to keep pace with the established packaging line. But the machine's capabilities suggest that a speed of 130 or 140 a minute would be possible if and when desired.

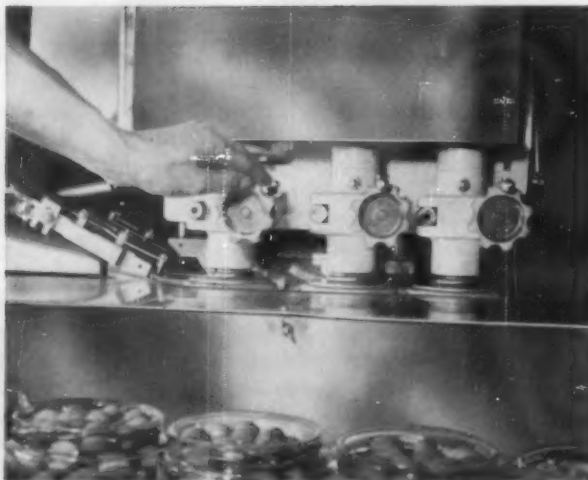
Kroger is considering testing the new cap on other olive jars. The cap is available in nine sizes, ranging from 38 to 89 mm. It appears to be suitable for tall, thin cylinder jars of place-packed olives as well as the presently tested wide-mouth refrigerator jar.

Credits: "Grip-Twist" vacuum cap by Ball Bros. Co., Inc., 1509 S. Macedonia Ave., Muncie, Ind. Capping machine by Resina Automatic Machinery Co., Inc., 572 Smith St., Brooklyn 31, with modifications by Ball Bros. Co.



Key capping operations follow each other from left to right. Jars enter pre-heater hood at left. Caps are sent, in right-side-up position, from hopper down the feed chute; jar's finish automatically picks up a cap as it passes pick-up point. Three capping chucks complete the sealing operations.

Vacuumizing is achieved between first and second capping chucks. Note steam-injection nozzle has dropped down behind jar whose cap has been cammed up by a tipping block. Raised cap is visible. Cap is then reseated and twisted shut by second and third capping chucks. Spring-loaded tightening rolls can be adjusted and locked in position so caps are applied with established torque-on value.





Dramatic display is achieved with window cartons and counter box showing full length and fine details of miniature HO train units for successful selling in toy outlets and hobby shops.

Recognition of American Flyer electric train units from a distance was stepped up by coloring cartons deep red with copy in reverse white instead of the traditional yellow and green. Cartons tailored to fit each car or accessory almost skin tight can be assembled in compact train-set cartons without additional protective stuffing.



Revitalized action toys

Gilbert is putting greater sales punch in new and renovated display packages to help science sets and electric trains move themselves in self-service retail outlets

Action toys need dramatic display packages with appeal for mothers as well as children to meet the requirements of modern toy merchandising, in the opinion of The A. C. Gilbert Co., New Haven, Conn.

This conclusion has set the company to work repackaging some of its action toys completely and revitalizing the packaging of others. New containers, new illustrations and inserts for old ones, brighter colors, fluorescent inks and new copy appeals are all employed to adapt these toys to the new merchandising pattern. This package-modernizing project may suggest some new approaches in packaging other hard goods more effectively for today's markets.

Point-of-sale demonstrations and talks have long been major selling devices for Gilbert's familiar American Flyer electric train, Erector, science and tool sets. But more and more, toys are being sold in drug, hardware, variety and jewelry stores rather



Eye-catching fluorescent ink delivers important copy from printed paperboard inserts to exploit the display value of a steel chemistry-set case when set up for use. Laboratory tools are mounted individually on the die-cut inserts.



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than in toy shops and department stores. Display space has diminished and demonstration selling has almost disappeared. Emphasis now is on self service and most toys are purchased by women.

The success of Gilbert's recent venture into the hobby train field, attributed largely to a packaging departure, pointed up the possibilities of display packaging for meeting this situation. Ho-type model trains, fine miniature replicas of real trains, have traditionally been sold in hobby shops as individual units or in do-it-yourself assembly kits. However, Gilbert's success has been in the toy rather than the hobby market. This posed a problem: how could Ho-type trains be merchandised in toy outlets patronized chiefly by women without losing the hobby-shop potential?

This apparent dilemma was solved by a multi-unit package designed to serve earnest hobby shoppers as well as to attract gift-seeking toy shoppers.

The company put each car, engine and set of tracks in a separate carton that displays it full length in a transparent plastic film window extending around two sides of the container. Double end folds and folded paperboard inserts hold the car firmly centered in the window and also cushion bumps. Company and product logotypes and reproductions of railroad semaphore signals printed on the carton frame the window. These containers permit a hobby shopper to examine the fine details of each car without removing it from the carton, eliminating the hazards of handling such relatively delicate models.*

A display carton for a complete Ho train set

holds seven unit containers plus two copy-printed cubical bumpers in a single-layer arrangement that exploits further the full product visibility afforded by the window cartons. About the size of a small dress box, the display carton takes little counter space and is handy for shipping or carrying. Copy printed in reverse white on red along its slant-folded bumper sides can be read equally well from the side or top. Lithographed reverse-plate copy and a large reproduction of a real train rounding a bend under full steam decorate the flat, die-cut cover. Hinged at the rear, it opens and folds along a horizontal score to form a vertical display designed to catch and direct attention into the box.

Packaged thus, train models accurate enough to please hobby purists also met the merchandising needs of retail toy outlets—self display, self protection, compact packaging and appeal to women seeking gifts for older boys and men. The company sold more than half a million dollars' worth of Ho train sets in the first year and is now introducing six new Ho trains in the same successful package.

This adventure in packaging generated a project to renovate containers for the newer science toys and for individual cars and accessories of the American Flyer train line (which accounts for 75% of Gilbert's \$15,000,000 in annual sales). Again, the goals were better self display and new appeal for women shoppers.

Each American Flyer car is now packaged in a folding paperboard box colored deep red and white instead of the traditional yellow and green. The company's black logotype remains, but other copy has been reduced to a minimum and printed in reverse white on red for legibility across a counter

*See "How to Get Rid of the 'Handle,'" MODERN PACKAGING, April, 1957, p. 87.

or room. Arrow-tail design of the red overlay and slanted modern lettering give the impression of movement. Lithograph reproductions of a train moving head-on emphasize that the toys are made to $\frac{3}{16}$ -in. scale from real railroad blueprints.

For protection in shipping and on the counter, boxes were designed to fit almost skin tight around each item in the line. Paperboard inserts support car wheels and paper wadding cushions both ends. Requiring no additional stuffing, these unit containers fit together in compact corrugated cartons to form pre-packaged train sets that save counter space and are easy to carry home. These cartons are also printed with the new red and white label.

Adapting chemistry and microscope sets to current merchandising patterns involved special problems. Science toys are considered valuable aids for developing young scientists. To children not yet aware of its wonders, science may seem earnest and educational rather than fun. To parents—mothers in particular—science toys sometimes suggest hazards to rugs, clothing and furniture, if not to life and limb. Furthermore, sales personnel with experience or training necessary to demonstrate science toys are no longer available in most toy outlets.

Gilbert packages its science toy sets in cases formed of sheet steel by the company to protect delicate microscopes and chemistry equipment in the home as well as in the store. Metal cases are shipped in corrugated cartons usually retained for point-of-purchase packaging and mailing. The cases are designed to be opened with the piano-hinged sections standing upright, forming miniature laboratories with all contents visible and accessible. To exploit their display possibilities more fully, the cases have been redecorated inside and out.

Case exteriors are light gray or blue for good visibility. The cover of each case is lithographed with a color-photo reproduction showing two boys at play with the packaged set, replacing designs now considered old fashioned.

When the case is open, paperboard inserts printed in bright colors and fluorescent ink take over the display job. Filling one or more sections of the metal case, these inserts hold equipment such as tweezers, scales, tubes, brushes, etc., in separate die-cut supports to emphasize the multiplicity of items in the set. Copy and illustrations label the equipment and suggest interesting experiments. In a large chemistry set, one entire insert frames the cover of a large instruction book illustrated with the same color photo reproduced on the case cover.

Copy appeals are keyed to both mother and child. Smaller chemistry sets highlight crime detection rather than science study to attract younger children and to appease mothers who might consider playing

Sherlock Holmes a safer project than imitating Louis Pasteur. In larger chemistry and microscope sets for older children, the inserts stress professionalism, with copy suggesting special skills in users.

The company has designed all-black point-of-purchase units for its chemistry sets to wring maximum display from messages printed on the new inserts with fluorescent ink.

Even bright-red metal tool chests have been sparked up for greater eye appeal and visibility on the counter. Blueprint-type lithographs inside and out proclaim the contents and suggest uses.

The company is convinced that display of its toys must be kept constantly in tune with the changing needs of toy merchandising and these examples are considered just a beginning in its campaign to do the job through packaging.

Credits: Cartons for Ho and American Flyer train units and display by National Folding Box Co. Div., Federal Paper Board Co., Inc., 405 Lexington Ave., New York 17, using windows of Celanese acetate. Lithographed metal sheet for tool, chemistry and microscope case covers by Masonware Co., Div. of Fram Corp., Dexter Rd., East Providence, R.I.; Caspers Tin Plate Co., W. 42 Pl. at S. Karlov St., Chicago, and The Sheet Metal Coating & Litho Co., 1303 W. Hamburg St., Baltimore, Md. Paperboard inserts by Abt Industries, Branford, Conn., using fluorescent inks by Switzer Bros., Inc. (Day-Glo), 4732 St. Clair Ave., Cleveland, Ohio, and Sun Chemical Corp., Div. of General Printing Ink Co., 10 St. & 44 Ave., Long Island City, N.Y. Corrugated cartons for train sets and metal toy cases by Continental Can Co., Inc., Gair Fibre Drum & Corrugated Box Div., 155 E. 44 St., New York 17; Interstate Container Corp., 7027 80 St., Glendale, N.Y.; Star Corrugated Box Co., Inc., 55-15 Grand Ave., Maspeth, N.Y., and Housatonic Corrugated Box Co. Stratford, Conn.

Open or closed, the traditionally bright red metal tool chest now proclaims its contents and maker via a blueprint-type display label lithographed both inside and outside the chest cover.





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PAPER

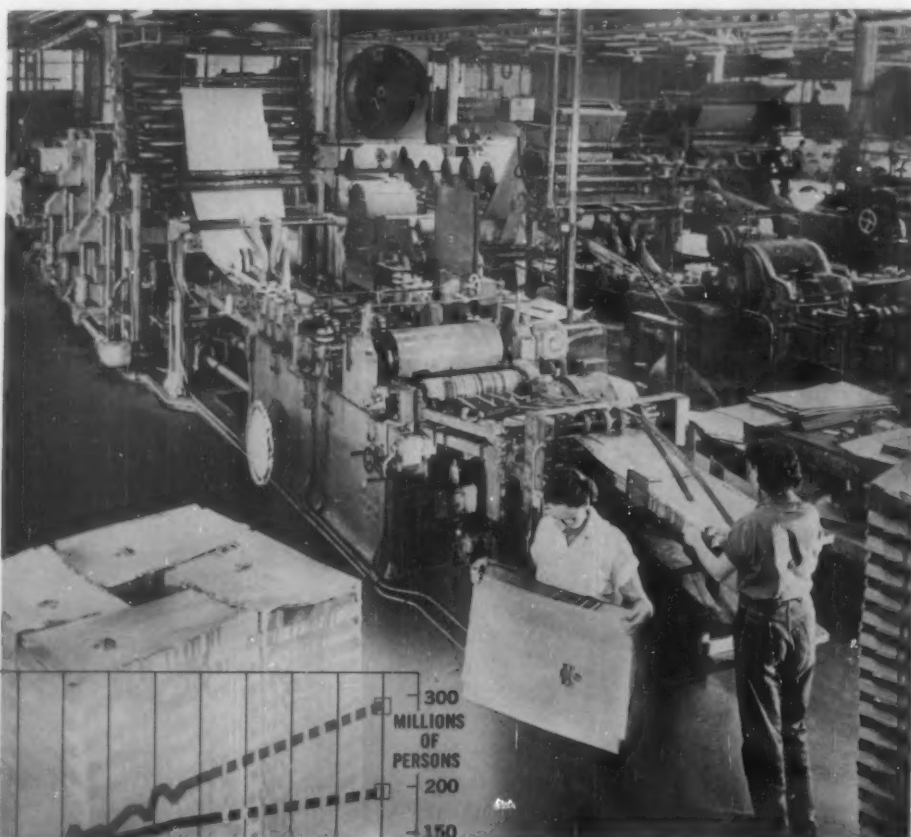
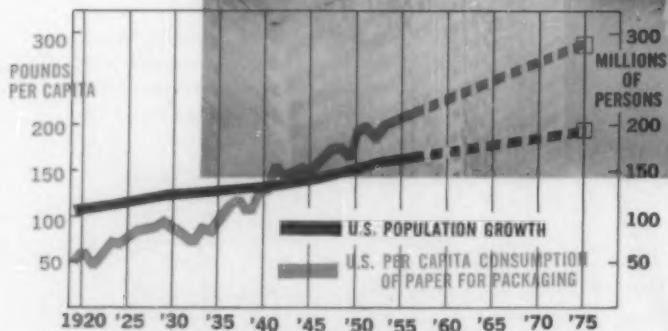


PHOTO COURTESY ST. REGIS PAPER CO.



Growing faster than our booming population, total annual use of paper in packaging has reached 200 lbs. per capita and is projected to reach close to 300 lbs. by 1975. Paper bags and containers form a sizable part of this. Photo shows production of multiwall bags at a big Southern plant. Chart by Union Bag-Camp Paper Corp.

PACKAGES

Bags and sacks, milk and food containers are consumed by the billions, thanks to improved properties that enable them to compete brilliantly against higher-cost materials

In the rush of more glamorous developments in plastics, metal and glass, it would be easy to overlook the solid and steadily improving position of that old workhorse—the paper package.

Yet it is—or should be—a rule of thumb that when you think of package materials you think of paper first. For paper is basically the most economical of all and if it will do your packaging job (with due consideration for physical properties, protective function and sales appeal) the search may stop right there.

And with the wealth of recent improvements in paper's properties, the list of packaging jobs it can do is rapidly growing. With wet-strength resins, paper today can be almost as strong wet as dry. With wax or resin coatings it is heat sealable, will hold liquids and can be nearly impervious to water vapor. With special treatment, it can, in certain glassines, be almost transparent. With the use of different chemical additives, it can be made to repel water and

grease and to inhibit mold growth and corrosion.

The economists tell us that every man, woman and child in the country this year will consume, on the average, 430 lbs. of paper, of which nearly half will be in packaging of one form or another. The per capita use of paper for packaging, now at the 200-lb. mark, has nearly doubled in the last 20 years; it is growing, and will continue to grow, much faster than our booming population.

A sizable share of this consumption is accounted for by paper bags, shipping sacks and sanitary paper food containers, which comprise the industry rather arbitrarily drawn together for the purpose of this month's Supplier Industry Survey.

Because they have been or will be covered separately in other articles of this series, this article specifically excludes the more rigid types of paper-board packages—each an industry in itself—such as folding cartons, set-up boxes and fibre cans. It excludes grocer's and variety bags, which of course

Printed paper bags are most efficient package for thousands of foods. Polyethylene lining greatly extends shelf life for "economy size" Sun Maid raisins.



PHOTO COURTESY SUN-MAID RAISIN CO.

Paper cups for ice creams and delicatessen items are familiar at practically every check-out counter today. Window lids add to their sales appeal.



PHOTO COURTESY PAPER CUP & CONTAINER INSTITUTE

Familiar paper containers move into new product fields



PHOTO COURTESY AMERICAN CAN CO.

Milk container makes an ideal package for prepared pancake batter—a product that is growing rapidly in popularity.



PHOTO COURTESY SEALBURY CO.

Plastic-coated paper cups and canisters, beautifully color printed, make effective, low-cost packages for such products as plant foods.



PHOTO COURTESY SEALBURY CO.

Cone-shaped paper bottle gives adequate product protection to bread crumbs, is also designed to catch impulse sales.

are retail carriers rather than manufacturer's packages. It excludes paper materials supplied in roll form.

With these important exclusions, what remains under discussion here is an industry producing approximately \$800 million worth of packages last

Big new use for the milk container is packaging of fresh, refrigerated orange juice. Fruit Industries brings juice to New York from Florida in 650,000-gal. shiploads, load cartons on lines like this at a speed of 140 a minute.



PHOTO COURTESY DU PONT MALLERINE.

year and ranking as one of the largest of the consumer-package supplying industries.

It includes every kind of paper bag used as the primary, unit package to protect a product from factory or processing plant to the consumer, covering all the lightweight specialty constructions used largely for consumer-sized packages as well as the heavy-duty and multiwall types used for bulk quantities. It includes paper containers for such products as milk, fruit juices, cottage cheese, ice cream, some kinds of frozen foods and delicatessen items—the tub or cup style of container which is not properly classified in the box categories.

An accompanying table lists the types of paper packages covered by this report and traces their growth, valuewise, over the last 10 years. The 1947 and 1954 figures are from the official Censuses of Manufacturers of those years; the 1956 figures are estimates based on preliminary Department of Commerce information.

Production value of these packages has more than doubled in the last 10 years, indicating a rate of growth considerably faster than the over-all upward trend of all kinds of paper and paperboard in packaging.

The star performers can readily be distinguished. The milk-carton type of paper package has grown since 1947 by an astonishing 560%; cups and other liquid-tight containers by 270%. The entire group of specialty bags (including glassine, greaseproof and waxed-paper bags) has more than doubled. On the other hand, food and ice-cream pails and miscellaneous sanitary food containers have grown but

slightly in value of shipments and probably have actually declined in unit numbers.

THE PACKAGE

The growth of the paper package has been greatly accelerated during the past decade by the extension of self service that demands a low-cost pre-packaged unit, as well as by the development of many of its improved constructions.

For literally thousands of packaging purposes the paper package offers unbeatable value in low cost, light weight to save shipping costs, space-saving convenience for warehousing (when it can be delivered flat or nested) and easy disposability in all cases by the consumer.

Nobody knows who invented the paper bag, but the beginning of mechanical production is usually associated with a patent granted to Francis Wolle of Bethlehem, Pa., in 1852 for a bag-making machine which, according to the original description:

"Consists in certain devices by the combined operation of which pieces of paper of suitable length are given out from the required width, cut from the roll and otherwise suitably cut to the required shape, folded, their edges pasted and lapped, and formed into complete and perfect paper bags which when dried are ready for use."

Today, 105 years later, just one company, the Union Bag-Camp Paper Corp., lineal descendent of the company Wolle and his associates formed in 1869, can turn out as many as 35,000,000 paper bags a day in a single plant, or an estimated 7 billion a year, representing 143 bags for every family in the United States.

Phenomenal in growth has been the heavy-duty multiwall bag, development of which began during World War I when the shortage of shipping cut off supplies of hemp. Heavy single-wall kraft sheets were not sufficiently flexible and experiment showed that two or more separate walls or plies of lighter-weight kraft provided stronger containers with greater flexibility. The advantages of having three or more plies (the true multiwall) became apparent, but not until the development of machinery for making bags of more than two plies did they come into wide use. About 1925 a method of sewing the ends permitted combining a number of sheets, each of which could be selected to meet the specific requirements of the product to be packaged.

The modern multiwall bag usually is made with from three to six plies, depending upon the weight, density and physical characteristics of the product. Current use is estimated at about 2.5 billion multi-

THE POSTWAR TRENDS IN PAPER PACKAGE PRODUCTION (value of shipments)

	1956 (estimated)	1954 Census	1947 Census
SPECIALTY BAGS			
Paper bags	\$70,000,000	\$49,500,000	\$31,400,000
Glassine, grease-proofed & waxed	45,000,000	32,100,000	21,900,000
	115,000,000	81,600,000	53,300,000
SHIPPING SACKS			
Single & double wall	65,000,000	63,000,000	37,600,000
Multiwall	200,000,000	192,100,000	115,600,000
	265,000,000	255,100,000	153,200,000
SANITARY FOOD CONTAINERS			
Milk & other beverage	185,000,000	147,500,000	34,800,000
Cups & other liquid tight	200,000,000	172,250,000	73,500,000
Food & ice cream pails	7,000,000	5,300,000	23,800,000
Other sanitary food	28,000,000	24,750,000	
	420,000,000	349,800,000	132,100,000
TOTAL	1,000,000,000	1,000,000,000	1,000,000,000

wall bags annually to pack more than 400 kinds of industrial, agricultural and other products. This is in contrast to the 650 million bags sold in 1939, half of which went to the cement industry. So efficient are the specially built-in characteristics today that multiwall bags are packaging successfully such moisture-sensitive products as calcium chloride, as well as molten asphalt that demands coatings to withstand temperatures of more than 450 deg. F. during the packaging operation.

Biggest in the category of paper containers aside from bags are the popular flat-top rectangular and gable-top milk containers, which now carry to market practically all retail milk and cream except for continuing use of returnable bottles for home deliveries.

The first paper milk containers made their appearance in 1929, but they were not used to any great extent commercially until 1934. Today industry-wide production of paper milk containers amounts to a staggering 13 billion units per year, according to latest estimates. This figure, for 1956, is a volume increase of 10% over the previous record of approximately 12 billion containers in 1955.

The disposable feature of the paper milk container and the colorful printing that may be applied to its surfaces to promote brand and product identification fit it admirably into today's self-service selling. And it is a matter of record that 41% of the families in cities of over 500,000 population buy all of their milk today in stores, while major

population centers show even large percentages of store-purchased milk.

Even bigger things for the paper milk containers are predicted as the result of its recent popularity for the marketing of fresh fruit juices, ready-mixed pancake batter and other such prepared foods.

Spectacular increases are seen also in the use of other types of liquid-tight containers, particularly for food products. U. S. Department of Commerce figures for 1956 show the use of 439,000 tons of special food board for nested paper food containers and cups, an increase of 137% above the 185,000 tons reported for this purpose in 1949.

THE INDUSTRY

The paper-bag industry is comprised of a listed total of 381 companies, located throughout the country as follows: East, 196; Midwest, 97; South, 41; West 47.

Because the majority of these firms make such a large variety of bags and because many manufacture products other than bags, the paper-bag industry has been unable to compile reliable statistics that give total unit production of paper bags for packaging alone, or to show the concentration of manufacture as is revealed for some of the other container-supplying industries.

Paper milk containers are made principally by two leading companies—American Can Co. and Ex-Cell-O Corp. (Pure-Pak), which divide about 80%

of the market—and Sealright, Inc., which is big in the general liquid-tight paper-container field but accounts for not more than 5% of the total paper milk-container business. Their plants are located at strategic geographic locations throughout the country. The containers are of two types—the flat top, which is delivered already formed, erected and waxed ready for filling, and the gable top, which is supplied as a flat blank to be formed and waxed on special machinery in the user's plant. The flat top is used most extensively in urban areas, where it is produced in branch plants to provide sources of supply close to users without long-distance shipping. The gable top has gained favor in less-populated areas due to the space-saving feature of the flat blank for shipping and warehousing.

At present there is a distinct trend in the paper-package industry toward fully integrated operation, under single ownership from the woodlands to the finished product. Pulp and paper companies are moving into the converting business and converters are buying up pulp and paper sources. The underlying motive in most such moves is to operate at maximum economy and maintain the price advantage which paper must have to compete with other forms of packaging.

DEVELOPMENTS

The urgent need for substitutes for more-strategic materials during World War II provided the incen-

Typical marketing uses of paper bags

PHOTOS COURTESY NATIONAL FLEXIBLE PACKAGING ASSN.



Double-walled waxed glassine gives protection and display value to Cain's potato chips.

Realistic illustration by letterpress printing and adequate product protection at low cost distinguish this bag package for Pillsbury pancake mix.



Dry dog-food mixes are very big users of paper bags. This beautifully printed bag for Purina Dog Chow was a First Award winner in recent Flexible Packaging Competition.

Protective liner of polyethylene-coated aluminum foil enables paper bag to preserve a pound of instant coffee against moisture gain or flavor loss.



PHOTO COURTESY ARBELL & SMITHS

tive for spectacular advances in the protective properties of paper packages. These advances have been carried over to enlarge the scope of this kind of packaging.

Wartime experience with many types of laminations, coatings and adhesives provided the know-how for much of the improvement that is giving added shelf life to paper packages today.

The multiwall-bag industry was called upon to develop multiwall bags to protect wartime supplies against the numerous and unusual shipping hazards encountered, such as tropical heat, subarctic cold, submersion in water and exposure to the elements. These rigid requirements led to specifications which permit multiwall bags to replace steel drums in many instances. Wet-strength paper was a wartime development. And today an even greater range of improved constructions is possible with the incorporation of plastic films, foils, coatings and adhesives which were either unavailable or unknown during the war years. New equipment for packaging in heavy-duty bags also provides more efficient packages that can be squared up neatly for space saving and more convenient pallet handling.

Since 1945 the use of paper shipping sacks has more than doubled, to 2.6 billion units last year, while textile bags have dropped about 45%.

Liquid-tight containers have been greatly improved in recent years by the use of better grades of paperboard, the development of more efficient wax combinations with resin additives and superior waxing methods to impart greater water-vapor resistance, higher surface gloss and better adaptability to automatic machinery.

Many consumer conveniences have also been added to consumer-sized paper containers, such as easy-opening tabs and non-spill, reclosable pouring vents. Appearance factors have been taken into consideration with the addition of window lids or covers of clear plastic to show contents. And the use of bleached board has greatly improved the over-all effect of the colorful printing now used so widely to promote brand recognition.

WHAT'S AHEAD

With an increasing population and the widening of retail outlets, the makers of paper packaging see an ever larger volume usage of the types of containers they produce.

Trends to be watched include:

► New constructions of paper containers such as the tetrahedron type, which can be formed and filled in one operation from a single roll of paper.



PHOTO COURTESY UNION PAC-PAPER CORP.

Heavy-duty paper bags such as these, which carry 50 lbs. of potatoes from the field to the consumer, have virtually eliminated the once-familiar "gunny sack" from produce markets.

- Expansion of the use of liquid-tight containers of the nesting and cylindrical type for the ever-increasing number of prepared and convenience foods.
- Greater use of these containers in the confectionery field.
- Wider use of milk containers for packaging of fresh fruit juices.
- Improved pulp formulations to give greater strength and provide still better printing surfaces on all types of paper bags, as well as liquid-tight containers.
- Improved machinery to fill and close these containers at higher speeds.
- More combinations with plastics to impart new protective properties.

Pricewise, paper packages are expected to follow the general economic trend. Prices here, as elsewhere, are dependent on the costs of raw materials, labor and equipment. So long as these continue to rise, there can be no price decline in paper packaging.

However, suppliers in this field feel that their products are relatively low cost in comparison with other types of packages and for this reason they are in a good position to win new users in a booming economy. And they are aggressively going after this new business.

Unbreakable roll-on deodorant dispenser

The roll-on applicator principle (see "Roll-on Deodorant," MODERN PACKAGING, Jan., 1955, p. 80) has been adopted for a new, unbreakable polyethylene deodorant package containing 1½ oz. of Etiquet Rolit lotion deodorant, introduced by Lehn & Fink Products Corp. The new Etiquet container is made of molded polyethylene. A polystyrene ball rolls in a well at the top of the package to dispense the product. A fluted polystyrene screw cap secures the applicator when not in use. Special equipment fills these containers and applies a translucent polyethylene base. The package is merchandised in a window display carton.

Credits: Design consultants, Alan Berni & Associates, Inc., 580 Fifth Ave., New York 36. Polyethylene container by Bradley Container Corp., Thompson St., Maynard, Mass. Polystyrene cap by Mack Molding Co., Ryerson Ave., Wayne, N. J. Polystyrene ball by Orange Products, Inc., 544 Mitchell St., Orange, N. J. Filling and sealing equipment by Horix Mfg. Co., Corliss Sta., Pittsburgh 4, Pa. Carton by Continental Folding Paper Box Co., Inc., River St., Ridgefield, N. J.



DESIGN HISTORIES

Champagne gift packaged in polyester

A gaily printed polyester plastic film bag and tags that can be changed with the season extend the shelf life of gift-packaged champagne, bottled by Cresta Blanca Wine Co., San Francisco.

The strength of the polyester plastic film has virtually eliminated bag breakage, according to the company. An outline design of champagne glasses and bubbles printed with metallic inks in silver and gold enhances the package for point-of-purchase display and makes it an attractive gift. A luxurious cord tied around the neck of the wrapped bottle has knotted ends to hold two tags—a label card to meet legal requirements and a replaceable, folded, foil gift card decorated for a special occasion or holiday. If the package remains on the shelf after a seasonal promotion, a new gift card decorated for another holiday or for general gift use can be attached to the package.

Credits: Bag by The Dobeckmun Co., 3301 Monroe Ave., Cleveland 13, Ohio, using Du Pont Mylar film. Label and gift tags designed by Shall, Nyeland & Seavey, San Francisco, and printed by Reliable Lithograph Co., 915 Battery St., San Francisco.



Colorful multipack with window boosts jelly sales

Successful test sales of three-jar multipacks of grape jelly by Kroger Co., Cincinnati, Ohio, suggest broad possibilities for a new method of automatically packaging glass-packed goods in multiple selling units. The new, three-color-printed multipack is produced by a new machine which combines the features of a window and in-line glass-container packaging in a single carton. Back panel of the carton, without a window, offers ample space for selling messages. The fully automatic machine wraps two to six glass units at a rate of about 20 cartons per minute, depending on the size of units used. The paperboard package is designed to meet shipping requirements for glass containers. Air space and paperboard separators that are an integral part of the carton eliminate the need for inserting corrugated separators.

Credits: "Glaspak" cartons and packing equipment by The Gardner Board & Carton Co., Middletown, Ohio. Glass jars by Owens-Illinois Glass Co., Toledo 1, Ohio, and Anchor Hocking Glass Corp., Lancaster, Ohio. Metal caps by White Cap Co., 1819 N. Major Ave., Chicago 39.



DESIGN HISTORIES

Foil labels on instant coffee jars

To gain a distinctive appearance on store shelves for its instant coffee, J. A. Folger Co., San Francisco, departs radically from conventional concepts in soluble coffee package designs. The 2- and 6-oz. glass jars, metal screw caps and wrap-around labels have all been revised both in color and in shape.

New brilliance is provided by a copper-color printed aluminum foil label and metallic copper-color cap. Background red on the label has been mellowed considerably, and the text and trademark, simplified and condensed for easier reading, are reproduced on front and back to facilitate positioning on the shelf. Ripples molded into the top and bottom of the jar make it easier to hold without slipping and combine with an embossed ripple effect on the label to give sparkle to the coffee itself. A wider cap ferrule makes for easier opening.

Credits: Design by Frank Gianninoto & Associates, 133 E. 54 St., New York 22. Glass jar and metal cap by Ball Bros. Co., Inc., 1509 S. Macedonia Ave., Muncie, Ind. Printed foil label by Reynolds Metals Co., 2500 S. Third St., Louisville 1, Ky.



Live root shipper

A strong, moisture-resistant package has enabled The Turfgrass Farm, Tucson, Ariz., to ship hybrid lawn grasses, such as Meyer Zoysia, more economically. The long, live roots are kept moist inside a bag made of polyethylene film, eliminating the need for shipping heavy soil. An outer bag of mesh burlap reinforces the package for handling. Enough grass with soil to cover 2 sq. ft. of ground weighed 28 lbs. in its former package. A package of bare root runners to cover the same area weighs only 24 oz. For the conventional package, roots were cut no longer than 2 in., tending to slow growth when planted. Roots from 4 to 8 in. long can now be shipped. The polyethylene film bag admits light, oxygen and carbon dioxide so that the plants can carry on photosynthesis. The reduction in shipping weight reportedly has saved purchasers up to 30%.

Credits: Polyethylene and mesh bags by Chase Bag Co., 309 W. Jackson Blvd., Chicago 6. Film by Visking Co., Div. of Union Carbide Corp., 30 E. 42 St., New York 17, using Bakelite polyethylene.



DESIGN HISTORIES

Shimmering golden cologne carton

Gold-colored foil laminated to paperboard and embossed by a new process imported from Europe gives unusual richness and highlights to the metallic surface of a folding carton for "Here's My Heart" cologne mist aerosol by Avon Products, Inc., New York. The fine-screen patterns of the embossing for trade identification and decorative illustration create striking third-dimensional effects that sparkle differently with each movement of the eye or package. On the top tuck flap, the foil is printed in the same shade of blue as the opaque glass aerosol container inside. Informative copy on the back of carton is also printed in blue. The bottle is shaped to look like a heart standing on a ring-circled base. Another smaller heart molded into the face of the bottle carries the product name in white. A gold-colored metal outer cap, decorated with tiny hearts and flowers, guards the aerosol valve release.

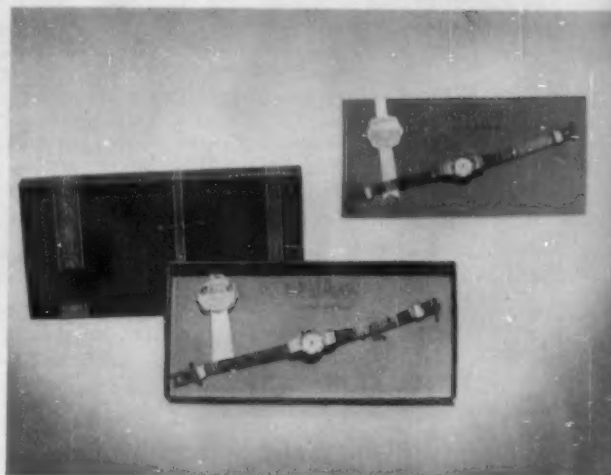
Credits: Carton designed and produced in "Shimmerglo" by Donrico, Inc., 438 W. 37 St., New York 18. Aerosol bottle by T. C. Wheaton Co., Millville, N. J. Metal cap by Scovill Mfg. Co., 99 Mill St., Waterbury 20, Conn.



Wrist watch cushioned in foam rubber

A new combination shipper-display-gift box protects and enhances the appearance of moderate-priced Medana wrist watches distributed by Louis Aisenstein & Bros., Inc., New York. Soft blue foam rubber cushions the watches against shock and provides an attractive background in the new set-up box, which has a gloss-coated black overwrap printed with a logotype and grained stripes in blue and gold. The foam rubber, about $\frac{1}{8}$ in. thick, is mounted on a paperboard platform. A die-cut paperboard easel on the back of the platform permits vertical display when platform is removed from the box. Mounted on blue ribbon attached to the back of the platform, a gold-colored foil price tag printed in blue can be torn off in a jiffy for gift purchases. Elastic cords hold the watch in place. Another sheet of foam lines the inside of the box cover.

Credits: Set-up box by Tobin-Howe Paper Box Co., 211 Mt. Prospect Ave., Clifton, N. J. Interior design by Display Creations, Inc., 3 W. 30 St., New York. Foam rubber by Schwab Latex Co., Inc., 640 W. 134 St., New York. Price tag by Star Tag & Label Corp., 252 W. 30 St., New York.



DESIGN HISTORIES

Easy-opening vermouths from France

Packaged for improved merchandising appeal and customer convenience, a new version of Noilly Prat French Extra Dry Vermouth is now being imported and distributed in this country by Browne Vintners Co., Inc., New York. The new product was formulated to meet the American demand for a "really dry" dry vermouth with the familiar flavor. Paler and lighter than before, the improved new product is now bottled in cool green glass.

The new package features an easy-to-open seal and closure to make the product more accessible to consumers and bartenders with less labor. The formed-aluminum top seal has a perforated tear strip with a small end tab. A thumb and forefinger suffice to pull the tear strip off and expose the new-type closure. This consists of a cork with a flanged wooden top that can be opened easily by hand without resorting to a corkscrew. Labels are now coated with varnish for greater durability in the "well" and better shelf display. A neck label carries the royal warrant—by appointment to her majesty Queen Elizabeth II. The new seal and closure are also used on sweet vermouth of this brand. All components of the new package are produced in France.



The hammock pack

Ingenious suspension of a zippered polyethylene envelope inside corrugated carton cuts damage to zero on a fragile aircraft instrument that had suffered heavy losses

The AiResearch Division of the Garrett Corp., Los Angeles, was having a packaging engineer's nightmare: It was experiencing a damage rate as high as 100% on shipments of an expensive, delicate aircraft instrument. A company in that fix is likely to try anything. AiResearch tried a new packaging idea—suspending the instrument in a “hammock” of polyethylene film inside a corrugated carton—and has since had a damage rate of exactly zero.

Not every AiResearch shipment, of course, hit the 100% damage mark. But on at least two shipments that was the rate and before the wholesale damage was stopped, more than 1,000 units had been returned for rebuilding. With a \$15-\$20 pair bill on a \$40 item, AiResearch was losing money fast.

The problem instrument is a fragile, copper-bellows pressure-sensing device weighing only a few ounces and measuring approximately 2 in. in diameter and 2 in. in depth. AiResearch had packed it in accordance with Government specifications—in a full-telescope chipboard box with cellulose pads

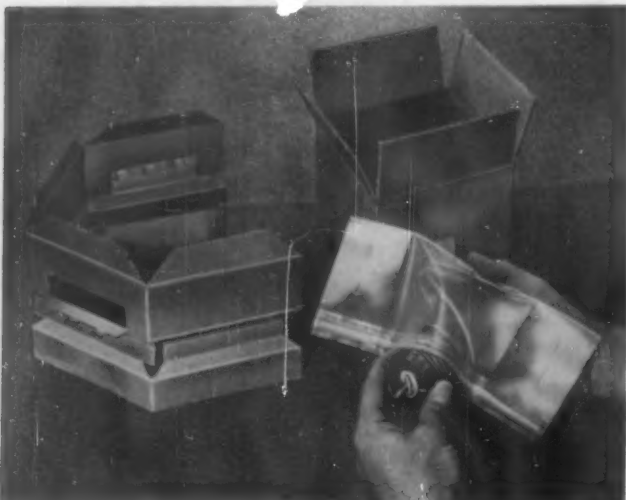
as cushioning. But specification packaging was not sufficient to prevent expensive damage in this case.

The new and novel technique literally suspends the fragile product in mid-air, restraining it from contact at any point in the sling of resilient polyethylene film. It is free to swing to a limited degree, but not to contact the sides of the box, which is a 5-by-5-by-4-in. standard corrugated carton, with special inside fitting.

The success of the package depends not only on the strength and resiliency of the polyethylene hammock, but also on the corrugated insert from which it is suspended. Since the strain is inwards, it has taken some careful and inventive engineering to devise an easily assembled insert with sufficient strength to resist the pull of the hammock.

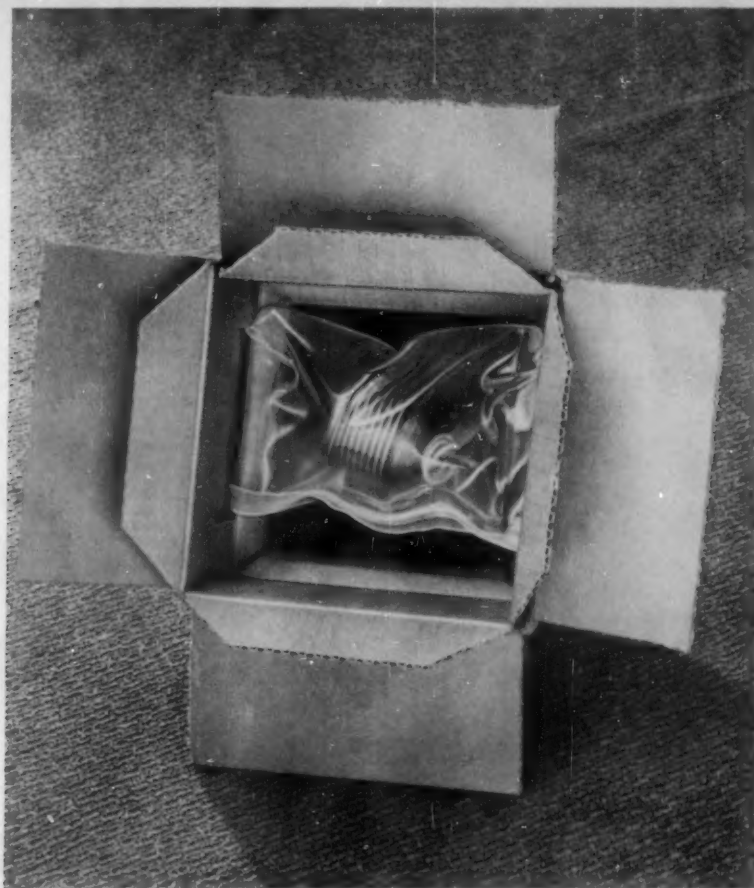
The hammock itself is a simple fold of 6-mil polyethylene film, heat sealed to form a cavity in the center section just large enough to contain the product. A plastic tongue-and-groove “zipper” is heat sealed to the raw edges to form a dustproof,

Components of hammock-type package used by AiResearch for a fragile, copper-bellows pressure-sensing device, shown being inserted into sealed-off center compartment of 6-mil polyethylene zipper envelope. Note rigidity given to corrugated insert by cuts and scores to form horizontal inward rim mitered to fit at corners.



Hammock in place in the holder. Die-cut, notched tabs of corrugated insert fit through corresponding slots in the polyethylene envelope.





Completed package, showing notched tabs holding ends of polyethylene envelope turned downward along container walls, making a secure lock. Note interior rib, formed in single piece of corrugated, which strengthens entire package.

moisture-resistant pocket, big enough for easy insertion of the product, but small enough to prevent any shifting or lateral movement. The hammock for the AiResearch bellows measures 10 by 3½ in., with a 4-in. pocket.

The special corrugated insert is of 200-lb.-test B-flute kraft, die cut to fit the inside dimensions of the box and the size of the polyethylene hammock. The insert gains its structural strength through the use of a horizontal stiffening rib on all four sides. The rib is formed by scoring and folding the board, and cutting hexagonal openings in the corners to form mitered joints. Additional strength comes from extensions on the end-panel ribs that lock behind the side-panel ribs.

The hammock hangs from die-cut, notched tabs in the end panels. The tabs fit into slots cut in the polyethylene film. Experience has shown that no additional reinforcement is needed to prevent the film from tearing. Mitered folds along the top edge of the insert keep the end panels from bending inward.

Carton, insert and polyethylene sleeve all can be stored flat, an advantage when intermittent shipments are being made. Products as heavy as 4 lbs. have been successfully shipped. At the other end of

the weight scale, a number of small components may be packaged in individual pockets along a single hammock. In general, the package works best when products have a high size-to-weight ratio.

The cost of the special package is said to be competitive with that of equivalent protection using foamed or rubberized-hair cushioning materials. Generally speaking, both the film envelope and the corrugated insert must be tailor made for the individual application. AiResearch has found that in interplant shipment it can re-use the package, since neither the hammock nor the insert need be destroyed in opening the package.

Present Air Force specifications do not cover the use of polyethylene in this application and until AiResearch's request for a specification change has been granted, it is using the polyethylene only for storage and interplant transfer. When shipments are made against Air Force contracts, the polyethylene is replaced with a laminated aluminum foil bag of similar construction stapled to the special insert.

Credits: "Swing-Pack" (patent pending) hammock and insert developed and produced by Polyfab Co., 2855 W. Avenue 35, Los Angeles, using Bakelite polyethylene film.

Fine printing on corrugated

Colgate gives life-like, full-color appeal to floor display stands

by printing halftone reproductions

on white-coated liner before combining it with fluting and inner liner

In the trend to better design and finer, more colorful printing on corrugated containers, which was pointed out recently in these pages,¹ the ultimate is fine-screen, full-color process printing. That stage has been reached in corrugated floor display stands which the Colgate-Palmolive Co. is using for self-service sale of Colgate Dental Cream.

Life-like reproductions—even skin tones—of a quality far beyond that obtainable by printing on the relatively soft and rough surface of corrugated board have been achieved by printing a white-coated kraft outer liner before combining it with the fluting and inner liner. The trick is in the combining operation rather than in the printing.

With this technique, printing is not limited to the soft rubber plates usually required for printing directly on the combined board; the liner paper, when properly coated and printed beforehand, can use such fine-screen methods as lithography and rotogravure. Colgate's container is lithographed.

While the Colgate container is a floor stand and not used in shipping the product, the possibilities of using this high-art technique on actual shipping containers, where the product and its handling would justify it, are obvious. Natural color photographs of foods have strong appetite appeal when reproduced by this method. Appliances and liquors are also likely candidates.

Self-service floor display stands have been used more than 27 years to push Colgate's products at the point of purchase.² Decoration of these stands, made of improved white-faced corrugated in folding constructions, formerly depended on rubber-plate printing methods that reproduce block color well, but only simulate fine-screen halftone. To get the human touch, reproductions of color photographs or wash drawings showing people or faces are often on the replaceable risers that carry sales messages. These consist of mounted color lithographs.

The display advantages of corrugated decorated by direct color reproduction have long been evi-

¹See "Corrugated Goes Beautiful," MODERN PACKAGING, March, 1957, p. 147, and "Pictorial Printing on Corrugated," MODERN PACKAGING, Aug., 1953, p. 98.

²See "Corrugated Stands: A Trend in Displays?" MODERN PACKAGING, April, 1955, p. 204.



Acceptance of Colgate's corrugated floor display unit is increased by attractive fine-screen reproduction of wash drawings in four colors. Harry Meeker, company's advertising production manager, instigated pre-printed corrugated.

Printing quality now possible on corrugated containers is illustrated by 16-pt. kraft liner paper which is designed to be used on a corrugated display container for a complexion soap. Four-color rotary lithographic printing on a web of white clay-coated liner paper prior to combining makes possible the detail and realistic skin tones evident in picture of movie star Cyd Charisse.

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dent. The problem was how to do it. Overwrapping corrugated stands with lithographed paper didn't meet Colgate's requirements because: (1) the extra combining operation was costly and slow, and (2) the wrap tended to crack at 180-deg. folds, debasing color work at those points when units were folded flat for shipping.

About five years ago, the answer was suggested by Colgate's advertising production manager, Harry R. Meeker. He thought a web of white, clay-coated kraft might be printed with fine-screen lithography before wedding it to fluting and an inner liner to form board. While the logic of this approach seemed unassailable, it involved many problems.

After some years of development work, corrugated emerged with its face lifted to a new level of graphic beauty. Sheets up to 85 in. wide by 144 in. long can be produced currently, with magazine-quality illustrations in registration, ready to be scored and cut for forming into display stands.

Lithographic, rotogravure or flexographic printing methods may be used, depending on the size of the run and the desired effect. Inks formulated to withstand heat and scuffing in the combining operation are said to help protect corrugated's glamorous new complexion against rough handling.

At present, cartons made with liners pre-printed with fine-screen halftones cost about one-third more than cartons of the same basic stock block printed in board form by conventional rubber-plate methods.

The new corrugated floor display stand for Colgate Dental Cream is made with pre-printed liner in four-color lithography. Front and rear-panel reproductions of the product package are softer in tone than those on the former stand. In addition, wash drawings of a father and a son brushing his teeth are reproduced in warm halftones on the side panels.

Set up, the corrugated stand measures 22½ in. across the front, 16½ in. front to back and 29 in. high. The tray holds tooth-paste packages in the familiar jumble arrangement. The mounted lithograph riser has been retained.

Already the new display stand has won praise from Colgate's salesmen, who point out that attractive appearance is the most important factor in getting a store to install such a unit.

Credit: Pre-printed corrugated ("Varni-Graphic") by Display Div., Gilbalt Corrugated Paper Co., Inc., 8101 Tonnelle Ave., North Bergen, N. J.

New corrugated shipping box has built-in pallet

A new convenience in materials handling is provided by the ingenious construction of a built-in pallet in a two-piece telescoping corrugated box adopted by Southern Wood Preserving Co., Atlanta.

The box, designed for shipping creosoted wood blocks, also reduces container inventory and cuts packaging costs. The single box can be used to package 12 sizes of the blocks, whereas 12 different-sized boxes were formerly used.

The integral pallet is comprised of two corrugated tubes placed inside the box base. Printed lines on the box side mark the position for entrance of the lift-truck fork. When the fork penetrates the tubes, the package can be carried by the truck.

The box base has a drop side to permit loading of the blocks below and above the tubes, holding them in position. When packing is completed, the drop side is raised and the top section slipped over the base. Three steel bands secure the box. All 12 sizes of blocks may be packed in this one container simply by varying loading patterns and using corrugated tubes of six different sizes.

Credit: Container by Gaylord Container Corp. Div., Crown Zellerbach Corp., 111 N. Fourth St., St. Louis.





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Packaging

Pageant

Packaging

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Packaging

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1 Supermarket appeal for Peter Paul Coconut, newest member of Peter Paul, Inc.'s candy-bar family, is provided by a six-bar window carton. All bar wraps are visible and back of carton promotes other bars. Design, Jim Nash Associates, Inc., New York. Carton, National Folding Box Co. Div., Federal Paper Board Co., Inc., New York.

2 A poster quality is achieved with bright new four-color-lithographed drums for Crag Glyodin, Union Carbide Chemicals Co.'s fruit fungicide. Design, Robert F. Neubauer, Inc., Bridgeport, Conn. Drums, Rheem Mfg. Co., Richmond, Calif., and Republic Steel Corp., Niles, Ohio.

3 Red-white-and-blue printed aluminum-foil-wrapped packages, adopted by Uncle Sam Breakfast Food Co. less than a year ago for Uncle Sam Cereal, reportedly upped sales 100% in existing markets and new territories. The bright package is a stand-out on the food-store shelf. Wrap, Reynolds Metals Co., Louisville, Ky.

4 Personal Products Corp. packages "Teen-Age by Modess" for young shoppers in a snowflake-patterned pre-wrap in over-all design of charcoal, olive and light blue on a white background. Design, Charles Magers, Princeton, N. J.

5 A footed transparent polystyrene jar fitted with a baby-pink urea screw-on closure provides a nursery re-use container for Lemmon Pharmacal Co.'s Prenal tablets, a new prenatal supplement. Pink of the plastic closure contrasts effectively with the light blue coloring of the product. Container and closure, Owens-Illinois Glass Co., Toledo, Ohio.

6 Mop heads and handle mops for supermarket sale by Clore Mop Co. are presented in polyethylene bags flexographic printed in two colors on the front. Mops are visible to the shopper through unprinted back of bags. Bag, The Dobeckmum Co., Cleveland, Ohio.

7 Poster-size design of new shipping containers for The Cayton Spice Mills Co.'s Park Hill coffee gives four-panel identification of contents to aid retailers in stockrooms. Printing is in red and blue on white kraft. Container, Stone Container Corp., Chicago.

8 Three cartons, joined in back, spread out fan fashion for effective display of three Seaforth's toiletries for men, called "Regimental Trio." Cartons, Warner Bros. Co., Bridgeport, Conn. Glass jugs, Hazel-Atlas Glass Co., Wheeling, W. Va., decorated by Ceragraphic, Inc., Hackensack, N. J. Caps, Mack Molding Co., Wayne, N. J.

9 Metz Co.'s circular barbecue grill, complete with stainless steel cooking utensils, is packed in a corrugated display box with die-cut handle that serves as a handy carry case. Special die-cut insert holds cooking utensils in place. Box, Hinde & Dauch, Sandusky, Ohio.

10 A transparent cellophane bag gives immediate recognition to Snakeskin Flex Protector marketed by Rose Projects of Bucks, England. A printed paper insert explains and illus-





11

trates product use. Bag, Pakcel, Ltd., London, using cellophane by British Cellophane, Ltd., London.

- 11** William S. Scull Co., Inc., puts a parchment liner into key-opening, 15-oz. cans of Boscul mixed nuts, then vacuum seals the cans from bottom instead of top. The liner reportedly cushions against breakage and provides a serving dish. Cans, American Can Co., New York. Liner, Harvey Paper Products, Sturgis, Mich.

- 12** Photographic reproductions of brownies feature this full-color waxed-paper overwrap for Buster's Butter Brownies, packed by Sharaf's, Inc., in a foil-lined tray. Wrap, Milprint, Inc., Milwaukee. Tray, Marathon Corp., Menasha, Wis.

- 13** New family design for Suber-Edwards & Co.'s line of retail meats effectively combines red, yellow and blue in a design that makes the packages stand-outs in crowded meat counters. Packages, Marathon Corp., Menasha, Wis.

- 14** A re-use jewel case holds five cartons of dental supplies for S. S. White Dental Laboratories. The metal-framed case with mirror inside lid is covered in gold-embossed simulated red leather and lined with satin and grosgrain. Case, Farrington Mfg. Co., Needham Heights, Mass. Cover material, Farrington Texol Corp., Walpole, Mass.

- 15** Topps chocolate fudge sauce made by Krim-Ko Corp. is easy to use in these polyethylene squeeze tubes. Die-cut display carton holds six tubes. "Bracon" tubes, Bradley Container Corp., Maynard, Mass. Carton, Carton Craftsmen, Chicago.

- 16** Silf-eez panties are individually packed by Silf Skin in a tiny carry carton. Handle, die cut from one panel of tuck-end carton, is easily opened and reclosed for customer examination. Carton, Continental Can Co., Inc., Gair Boxboard & Folding Carton Div., New York.

- 17** Masculine appeal is keynote of carton and tube design for Revlon's "Top Brase" hair dressing for men. Design, Nesbitt Associates, New York. Carton, Lord Baltimore Press, Baltimore. Tube, Peerless Tube Co., Bloomfield, N. J.

- 18** Old Gold Filter cigarettes' new red-white-gold design represents the first basic package change since these cigarettes were introduced 31 years ago. Printing, Strawberry Hill Press, Inc., Long Island City, N. Y.

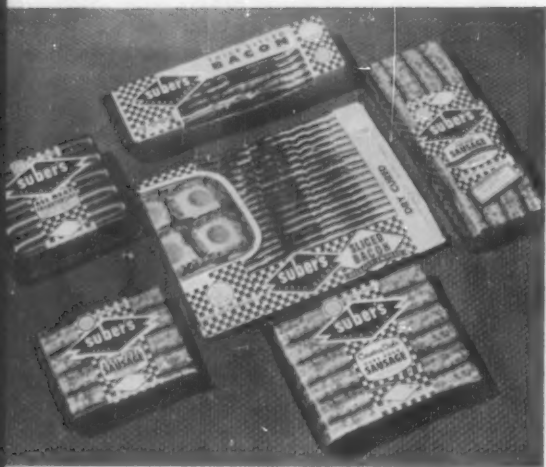
- 19** An effective, economical package for Ideal Cement Co.'s Portland Cement is this multiwall bag with pasted valve, designed to hold inexpensive inert products. "Stepped-End" bag, Crown Zellerbach Corp., San Francisco.

- 20** Skin packaging has been applied to a line of imported stainless steel flatware by Continental Stainless Corp. for supermarket and self-service sale. Design, Eckstein-Stone, Inc., New York. Printed cards, Continental Can Co., Inc., Gair Boxboard & Folding Carton Div., New York. Skin packaging, Skin-Pack Corp. of America, Brooklyn.

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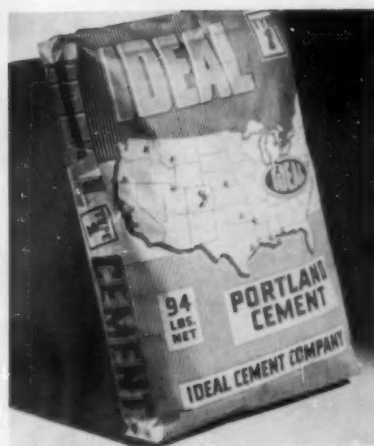
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Original package sold bras despite seal that made contents unavailable for customer fitting or examination. The display rack did not have proper appeal to fit in with most department-store decors.

Two-at-a-time sales are effected with 57% of shoppers who lift this double unit from rack although only a negligible percentage had intended to buy more than one. Paperboard package is of folding construction made in one piece and bent back, wallet style. Perforation at the top permits tear-apart if a customer wishes to buy just one bra.



New proof for bras

*Exquisite Form confounds the skeptics
by showing that packages not only sell bras,
but can sell them two at a time;
Nettie Rosenstein adopts closed carton
for new high-fashion line*

Skeptics in the brassiere industry have been confounded in more than one instance recently with proof that packaging sells brassieres.* Now Exquisite Form Brassiere, Inc., is proving that a double-unit package in this field, as in so many others, can transform a single into a double-unit sale.

This latest step in brassiere packaging again demonstrates pointedly how packaging can often push up sales despite surveys and retailer attitudes to the contrary.

The entire history of Exquisite Form's packaging development is worthy of the closest study by those interested in the department-store market, for it shows an indisputable record of success with an item which the stores had considered most unadaptable to packaged selling. It suggests that many other areas of resistance to packaging in department stores should be similarly tested.

Called "Twin-Pak" by Exquisite Form, the new selling unit is actually two separate packages in one

*See "Fluorescence by Letterpress," MODERN PACKAGING, April, 1956, p. 86.

that may be purchased together or singly. Of folding-box construction, the double package is made of a single piece of board scored and perforated at the top for tearing apart if desired. When bent back-to-back, wallet style, and placed in a display rack, the Twin-Pak appears to be a single package.

The selling psychology is this: When the customer removes the unit from the rack, she has the double package in her hand and is at once susceptible to the appeal, "Triple the life of your bra. Wash one—wear one."

If she wants only one, she can easily detach it. The remaining package, unmarred, is available for single-unit sale. The Twin-Pak is sized to fit all Exquisite Form counter and floor displays.

Irwin Roseman, Exquisite Form's director of advertising and sales promotion, who has been in charge of creating and designing all the company's new packages, reports that in tests over a six-month period, 57% of the women who lifted the package from the rack bought the double unit, although only a negligible percentage originally had the idea of buying two brassieres.

For the initial national launching, Exquisite Form is packaging style No. 502, described as "America's Most Popular Bra," and "Festival," a recently introduced style which the company reports has become a runaway best seller, in the new Twin-Pak.

Mr. Roseman also restyled the packages for improved appearance, using metallic inks and high-fashion illustrations. The "502" package is distinguished by metallic lavender ink; "Festival," by metallic green ink.

Background

Exquisite Form started pioneering brassiere packaging several years ago in the face of stiff trade resistance. Soft-goods retailers generally, the company says, have been very reluctant to accept packaging—particularly for brassiere departments. Usually, the greater the prestige of the store, the more reluctant it has been to make the switch. Fitting a brassiere has been regarded as a personal service. Many retailers have reasoned that a package is impersonal and gets in the way of the fitting service. They have reasoned, too, that when a woman buys any garment, she wants to examine it carefully.†

On the credit side, packaging offers opportunities to increase sales by promoting impulse buying, facilitating outpost merchandising and improving display. It can also help to cut costs by saving selling time, increasing "take-withs," reducing damage and returns, and simplifying inventory control.

†See "How to Get Rid of the Handle," *MODERN PACKAGING*, April, 1957, p. 87.

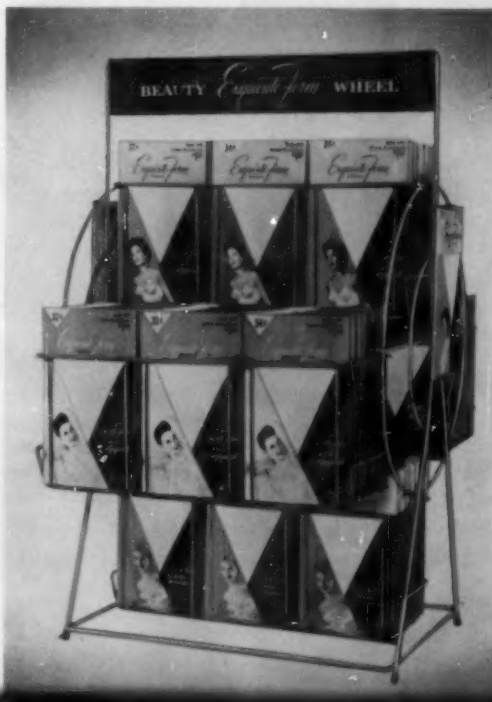


Gift package of three bras spurred idea for the Twin-Pak. Company does not believe customers purchase bras as gifts, but multiple "gift" package sold so well it is being repeated in 1957.

Brassiere-industry research raised questions about the validity of the traditional retailing concepts. For example, it was found that in one large Southwestern store which took pride in running its bra department as a service department, only one out of 10 customers was being fitted before a bra sale.

Yet market and consumer studies sponsored by Exquisite Form indicated that neither retailers nor customers favored the idea of pre-packaged bras when it was first presented to them. Of 68 retailers

Now display stands have been upstyled to harmonize with interior decoration used in best stores and to conserve counter and floor space. Ferris-wheel unit displays a wide range of styles and sizes in the colorful, high-fashion packages.





Compact counter rack for three dozen packages helps Exquisite Form to coordinate promotions with other departments such as blouses and notions, aiding brassiere department and other departments. Units can be linked side by side.

in Philadelphia, Boston and Rochester, only 29 approved pre-packaging.

When 658 women in Cincinnati, Wilkes-Barre and Phoenix were questioned about their buying habits, only 18% welcomed the idea of pre-packaging brassieres without reservations and 24% approved with reservations. The main comment of the latter group: "If it's the same make and style and size I always buy, it would be O.K. Something new, I wouldn't buy that way." A whopping 58% disapproved of the idea. Their main objection: "Can't determine construction and quality; can't feel the material that way." And 22% pointed out that there would be fitting difficulties.

Exquisite Form engaged a psychological research organization to do a depth motivational study of brassiere purchasers. These findings also indicated that pre-packaging should be approached cautiously.

Despite the surveys, Exquisite Form decided to go ahead with packaging because: (1) more than one-third of the retailers surveyed were willing to try it; (2) at least 42% of the consumers surveyed thought they liked the idea, and (3) the company thought that after a trial these percentages could be increased. The experiment was started at the safest point, with the company's best-selling item, Style No. 502.

In the brassiere industry's initial attempts at packaging, all the companies involved made mistakes and

Exquisite Form admits to as much guilt as any of its competitors. The first packages were tasteless in design and impractical in use, and the display stands were worse, they say. Yet, there was one indisputable fact about them—they sold and sold and sold.

The first experience proved what the company now calls Exquisite Form Packaging Law Number One: Poor packages, poor display racks will sell from 18 to 300% more brassieres than no packaging.

The company also learned what it calls Exquisite Form Packaging Law Number Two: The rate of increase in sales due to packaging is in direct proportion to the accessibility of the package to volume traffic. With racks in poor traffic locations, business jumped an average of 18%; in heavy traffic locations, business jumped as much as 300%.

Style No. 502 reportedly is still America's best-selling bra. Its total volume is up more than 50% over its last non-packaged year. As retailers learn more about display locations, its volume increases. In the four weeks ending May 15, 1955, packages accounted for 18.7% of "502" sales. In the four weeks ending May 17, 1956, packages accounted for 40.4% of "502" sales. As of May, 1957, 51.3% of "502" sales are packaged.

And one final statistic: Each individual package costs 2.6 cents for paper and printing, and 0.67 cents in extra packing labor. Retailers know that before a manufacturer will give up more than 3 cents on an item that retails for \$1.50, he must be quite sure he will do enough extra volume to recoup that loss and more.

How far to go?

Exquisite Form's success with style "502" still left two important questions: (1) Would women buy higher-priced lines in packages? (2) Would women buy new styles in packages?

The first question was answered with a brassiere called "Floating Action," retailing at \$2.50, which after packaging got the same percentage volume-increase results as "502" at \$1.50. As of May, 1957, better than 55% of all "Floating Action" sales are in packages.

By this time Exquisite Form had acquired a good deal of practical experience with packaging and decided to revamp entirely its packages and displays before packaging any new styles.

The main virtue of the original cellophane package was that it *was* a package and, therefore, it boosted sales. But in many ways it was impractical. The sealed-in bra was unavailable to the customer for fitting or examination. The package required store ticketing. At one well-known West Coast department store, a \$4,800 shipment of Exquisite Form brassieres rested in the basement for seven

weeks awaiting its turn at the one operating ticketing machine.

A new envelope-style package of paperboard was designed which could be opened for try-on and re-closed. A color scheme permitting variation of colors for each style preserves general uniformity of appearance while simplifying rack display and inventory. A transparent acetate window shows the garment sufficiently, but does not tear with customer handling.

On the reverse side, sales-clerk education and the product's own sales message to the consumer were simplified and made more attractive. A little pre-ticketed sales slip, that can be detached easily without damaging the package, enables it to travel directly from factory to the retailer's display rack without a long wait in the ticketing line.

The same package principles are carried over to the Twin-Pak, developed after Exquisite Form tried putting three brassieres in a multiple gift package for the 1956 Christmas season. The company can-

not believe brassieres are bought extensively for gifts, but the gift package demonstrated that they are bought in multiple units—so much so that the company is repeating the gift carton this year.

The same type of evolution has taken place in Exquisite Form's floor-display units. The company learned very quickly that if it could furnish a store with an expensive and elegant unit that would appear attractive in plush surroundings, the store would hesitate to reject it. [Continued on page 202]

Credits: Twin-Pak cartons by Container Corp. of America, 38 S. Dearborn St., Chicago 3. Gift and single-unit packages by Blum Folding Paper Box Co., Inc., Valley Stream, N. Y.; Armor Box Corp., 223 Raymond Blvd., Newark 5, N. J., and Continental Folding Paper Box Co., Inc., River Rd., Ridgefield, N. J., using Celanese acetate film. Ferris-wheel display by Product Presentation, 55 W. 42 St., New York 36. Counter display rack by Perma Wire Display Corp., 76 Greene St., New York 12; printed paperboard rear panel by Enterprise Advertisers Service, 229 W. 28 St., New York 1.

Nettie's new package has eye-stopping line and color

If any doubt remains as to packaging's complete victory in the foundation-garment field, it should be dispelled by the news that *haut couturiere* Nettie Rosenstein will pre-package every item in the expensive new line which marks her first venture into foundation garments. This is no "popular price" line; price tags will range as high as \$50, with the majority in the \$5-\$10 range. Yet all selling reliance is placed on a colorfully designed folding carton which does not offer even a window view of the contents.

To catch the shopper's eye and to suggest high-fashion contents, these folding cartons are made of high-gloss white paperboard and printed with an unusual combination of purple, magenta and turquoise inks. All these colors appear in the brand name printed on top in large, uneven script, as well as in the style, size, color and price data printed on slanted front and rear and straight side panels.

Turned bottom-side up for opening, the carton displays a sales message illustrated with drawings of the item in use. One finger flips out the tuck-in flap, so the item can be examined, and closes it with equal ease. An inventory-control tag printed at the closure point is perforated for easy detachment when the package is purchased.

Credits: Design by Howard Ketcham, Inc., 101 Park Ave., New York 17. Box by Brooks & Porter, Inc., 304 Hudson St., New York 13, using "LusterBoard" by S. D. Warren Co., 89 Broad St., Boston 1, Mass.



Logotype label with large, rough letters in purple, magenta and turquoise captures attention and identifies packaged bra or girdle with designer's high-fashion dresses. Turned over for opening by a one-finger flip of tuck-in flap, folding carton of high-gloss paperboard reveals illustrated sales message and perforated inventory-control tab.

Cigar art with multi-plane effects

The advantages of a flat unit for shipping and space saving are combined with those of three-dimensional display in a new window unit for White Owl Cigars, made by General Cigar Co., Inc., New York. Though lithographed on flat paperboard, the display produces a multi-plane effect. The theme of the display is the promotional tie-in between this cigar brand and the Broadway hit show, "The Most Happy Fella." What appears to be a box-shaped theatre marquee at the top of the unit proclaims this sales message. Under it, an illustration of the sprightly leading character of the show, reproduced in full costume, is shown smoking a cigar and jumping gleefully into the air from the edge of an open box of the cigars. A reproduction of the pocket cigar package is also included in the display. The three-dimensional effects that make this flat unit look like the real thing have been obtained through artful use of perspective in the artwork itself and in the over-all shape, as well as by careful shading.

Credit: Display by Consolidated Lithographing Corp., Carle Place, Long Island, N.Y.



Display Gallery

Selectable dyes

A new revolving metal display rack helps self-service purchasers to make a selection from 34 different colors of Tintex dyes made by Tintex & Toiletries Div., Park & Tilford Distillers Corp., New York. Color remover and bluing are also displayed in the double-sided unit which has 36 compartments holding six packages each. The unit is delivered pre-packed and takes only about 1 ft. of counter or table space. Display cards facing both directions rise from the center of the stand. The unit is also designed to help the retailer maintain inventory control and make re-orders. A slot at the bottom holds re-order cards which are coded in colors and numbers to the different shades of dyes. When a display compartment is running low, the retailer can either turn over to the wholesaler the card coded to that dye or use the data on the card to fill out a pre-printed order form.

Credits: "Colorvision" revolving metal rack and display cards by Perma Wire Display Corp., 76 Greene St., New York. "Order Motivator" cards by Murray-Bridge Press, Inc., 263 William St., New York.



Whiskey turntable

A wire-rack counter-display assembly built like a familiar "lazy susan" table serving unit has been offered to retailers by Glenmore Distilleries Co., Louisville, Ky., for merchandising its Old Kentucky Tavern whiskey. Designed for the convenience of both retailers and customers, the rack occupies a minimum of counter space. Revolving on its center axis, the unit provides prospective customers a quick review of available selections in this brand. It holds bottles in fifth, pint and half-pint sizes, both 100 and 86 proof.

The rack is constructed with a low guard rail around each tier to keep bottles from sliding out of place or off the unit.

For quick brand identification, the white-on-red logotypes are reproduced on a metal band around the outside guard rail and on a triangular metal riser with rounded corners attached to the top of the center post. The revolving feature also gives the retailer easy access to any desired bottle from behind the counter. The unit is almost 2 ft. high.

Credit: Display by Associated Displays, Inc., 49 E. Oak St., Chicago.



Display Gallery

Aromatic carousel

The romantic gaiety of a carousel is suggested by a new window and counter display unit designed for the Balalaika fragrance line by Lucien Lelong, New York. The paper-board base of folding construction ships flat and sets up to form a flat, rectangular front apron backed up by a rectangular platform several inches high. Products can be arranged as desired. A cylindrical tube center pole for the impressionistic carousel is supported in die-cut openings in the base platform. Long paper strips suspended from the top of the tube pass through slits in a wheel-shaped piece of board decorated with printing and scalloped edges to form the "roof" of the carousel. The paper strips drop from there to the base in graceful lines that lead the eye to the items on display. A bouquet of artificial flowers tops the cylindrical pole, which also holds a brand-name display card. The raised platform is die cut to hold a large cut-out illustration of a man playing the balalaika with a woman seated behind him.

Credit: Display by The Chaspec Mfg. Co., 342 W. Putnam Ave., Greenwich, Conn.



FLOCKED POLYSTYRENE



Soft, rich setting for silver is economically provided by vacuum-formed platform of polystyrene sheet pre-flocked with blue rayon. The material has both the appearance and the feel of velvet.

A new process for rayon flocking of polystyrene sheet prior to vacuum forming has provided International Silver Co., Meriden, Conn., with a low-cost, fitted package for silver flatware which, the company believes, will open new vistas in gift merchandising for many products.

In its application to silverware, the flocked-polystyrene platform not only lends a luxury air, but overwrapped and sealed in strong, clear polyester film, helps to protect against tarnish and handling.

Flocked with white or colored rayon or cotton fibres in plain or embossed patterns, the polystyrene material is supplied to the vacuum former in rolls or sheets from 0.010 to $\frac{1}{4}$ in. thick. International Silver's experience suggests that the plushy plastic may have many uses in low-cost platforms, displays and even complete packages for luxury-type items.

To introduce its new Lady Fair pattern of popular-price silver flatware, International wanted

to offer five serving pieces in a gift package at an exceptionally low introductory price. The package was the crux of the matter. In addition to being inexpensive, it had to hold the pieces securely in place; display them fully and enticingly; protect them from air and handling, and serve as an attractive and handy take-home or gift package.

Traditional methods could not meet the requirement. Silver flatware is usually packed in wooden cases holding an entire set, or else wrapped individually in polyethylene film for bulk shipment. The company had packaged single settings of stainless steel flatware in folding boxes with die-cut display lids and die-cut platforms to hold the pieces in place. However, these lacked some of the basic requirements for packaging silver and were costly to load by hand.

The combination of an inexpensive vacuum-formed plastic platform flocked with rayon fibres

*Vacuum-formed new plastic sheet with the velvet touch
gives International Silver a luxury package
that protects gift sets of flatware at a minimum of cost*

and overwrapped with clear plastic film seemed ideal. But since flocking formerly had to be sprayed or applied through an electrostatic field onto each platform after it had been shaped, the cost was too high. In addition, it was difficult to apply flocking evenly to a platform of the desired shape.

The new development made this package possible by providing a pre-flocked material that retains its beauty and flexibility after being vacuum formed. Flocking entire rolls of the extruded plastic sheeting at one time is far more economical and produces a more even surface. The flocked sheet is said to form in almost the same cycles as unflocked material. While the fibres may tend to thin out at the base of a deep-draw cavity, this is not apparent to the eye.

For International Silver's package, polystyrene sheeting 0.015 in. thick is extruded, then is flocked in rolls and cut into sheets measuring 23½ by 28 in. These are vacuum formed by a contract supplier to produce platforms 9½ in. long, 5⅝ in. wide and ¾ in. high with cavities shaped to hold five different silver serving pieces. For additional strength, a folding paperboard tray is inserted to give the platform a base.

At International's plant, each different serving piece is loaded by hand into its designated, specially shaped cavity. Two coral-colored strips of pressure-sensitive paper tape printed with brand and pattern names in black are pressed over the top and down each side to keep the pieces from slipping out of place. Thin, transparent polyester plastic film is then automatically wrapped around the package and sealed with a solvent. Corrugated cartons holding 30 of these packages carry them to silverware outlets such as jewelry and department stores.

For all its luxury air, the package cost, including loading, is about half that of the paperboard platform boxes used for stainless steel flatware, according to the company.

All components of the package—flocked plastic, tape and overwrap film—passed International's "plate test" satisfactorily. The resulting protection against tarnish insures the packaged silver a normal shelf life, facilitating national distribution and display merchandising.

On the store counter, the new gift package serves as a miniature showcase. Resting in a background of rich blue, velvety rayon flock, the silver pieces gleam

brightly in full view through the clear overwrap film.

Silver packaged in this way has been received so well that International is already at work designing new versions to exploit more fully the innovation and the new pre-flocked plastic sheeting that made it possible.

Flocked with white cotton, the new material has also been used to vacuum form a platform with a flower-like pattern for a perfume display package. Cotton-flocked versions are in the works to replace more costly platforms now made of wood or metal covered with soft textiles in packages for items such as electric shavers and photographic equipment.

Credits: Vacuum-formed platform by The Box Shop, Inc., 373 Lexington Ave., New Haven 13, Conn., using "Stylour," made of Dow high-impact Styron resin extruded by The Gilman Bros. Co., Gilman, Conn., and flocked with Rayon Processing's fibres by Nashua Corp., Nashua, N. H. Tape by Transparent Products Co., Inc., 324 E. 24 St., New York. Overwrap of DuPont Mylar polyester film.

Overwrapped and sealed in tough, clear polyester film, the package displays pieces fully and eliminates tarnish-causing handling. Coral-colored pressure-sensitive tape with brand name printed in black adheres to the flocked surface, holds pieces in place. The folding paperboard tray underneath gives necessary rigidity to the base.



OWENS-ILLINOIS ASSURES YOU A COMPLETE PACKAGING APPROACH



Co-ordinated Research

Pure research into fabrication of glass, packaging research into processing and handling methods in customer plants, market research into consumer attitudes. All add up to greater packaging value.



Engineered Design

At Owens-Illinois, your package's *three* needs are taken into account: 1) Considerations of its function in the retail store, 2) its operating efficiency, and 3) its consumer utility.



The Right Container

There's an O-I container to meet your special needs: Duraglas containers; Libbey Safedge packing tumblers or premiums; Kimble Ampuls and Vials; and a variety of plastic containers.



The Right Closure

For example, the Stak-R-Cap is especially important where fast, secure stacking is needed in retail display. In other cases, the protective liner or decorative factor deserves prime attention.



Needed Fitments

O-I specialists are keenly aware of sales benefits derived from plastic shaker and pour-out fitments which are not "gadgets" but which increase consumer satisfaction with your product.



Merchandising Cartons

Modern cartons are developed only through systematic consideration of their opportunity to serve you in the retail warehouse . . . as well as on your own filling line and in transit.





Duraglas packages protect, display, and dispense your spices and seasonings.

Spices and seasonings sell faster in Duraglas dispenser containers

BACKYARD CHEFS and kitchen queens ask for glass-packed spices and other seasonings because they're so easy to use—so much easier . . . a wide assortment of *your* seasonings in matching sizes is easy to keep on hand . . . and the container is the dispenser, too.

Duraglas packages for spices and seasonings answer your customers' needs. They assure complete, sanitary protection, are easy to handle and store, and allow instant visual checks on contents. For non-

flowing seasonings, large-mouth containers allow quick removal of contents . . . for others, shaker and pour-out fitments provide easy dispensing, and tight closures protect the tempting aroma to the last use.

Call the nearest Owens-Illinois branch office for the details on the complete Owens-Illinois packaging service—the *right* Duraglas container, fitment, and closure—sturdy cartons imprinted with your sales message—attractive, eye-catching label designs.

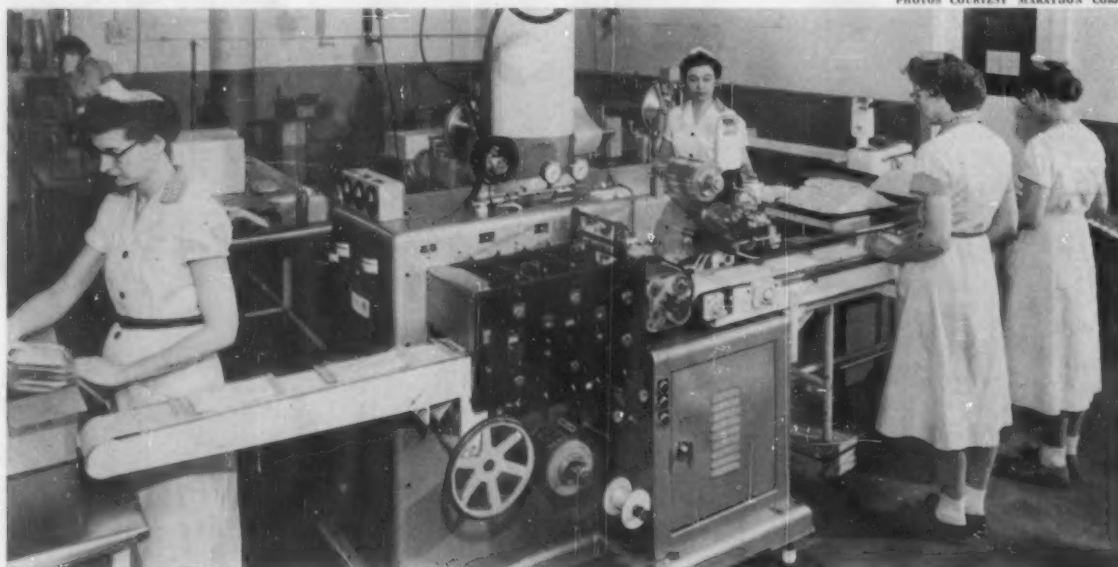
DURAGLAS CONTAINERS
AN **Ⓢ** PRODUCT

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New efficiency in gas packaging

Wisconsin cheese company pioneers use of a long-awaited machine that continuously and automatically, from rolls, forms, fills and seals nitrogen-flushed flexible pouches

PHOTOS COURTESY MARATHON CORP.



Continuous machine, first of its kind, takes stacks of sliced natural cheese from the infeed conveyor at right, flushes out air and encloses each stack in film in the nitrogen chamber, then seals, cuts off and discharges packages at a speed as high as 48 a minute. Film is fed from rolls above and below; small lower reel feeds polyester tear tape used on film pack.

Introduction of new continuous, automatic machines that can form from rolls, fill, gas flush and seal flexible pouches at high speed and economical cost is being closely watched by the packaging world. This is the development which, in the view of some observers, can make the inert-gas pack as basic as the paraffined carton.

Rancidity due to oxidation in foods high in fat and oil content has long been a trouble spot in packaging. A special problem with cheese has been the prevention of mold growth. Several methods have been employed to combat oxidation and mold, and the removal of oxygen content from the package and

its replacement with an inert gas is one obvious and effective answer. However, up to now, flexible pouches capable of holding a gas atmosphere have generally been prefabricated and two-stage equipment capable of filling, evacuating and sealing them has been of a relatively slow, semi-automatic nature—all adding to cost in a field where packaging cost is often critical.

Special interest, therefore, attaches to a new machine which has had its first installation at L. D. Schreiber & Co., Green Bay, Wis., to package sliced natural cheeses that are nationally distributed under its own or chain stores' brand names. Operat-

ing continuously from two rolls of coated film and/or foil, it turns out completed gas-flushed pouches, at speeds as high as 48 a minute, without the necessity of first drawing a vacuum.

The machine probably can be adapted for use with processed cheeses, meat products, dehydrated foods, popcorn, coconut and a host of other oxidation-prone products.

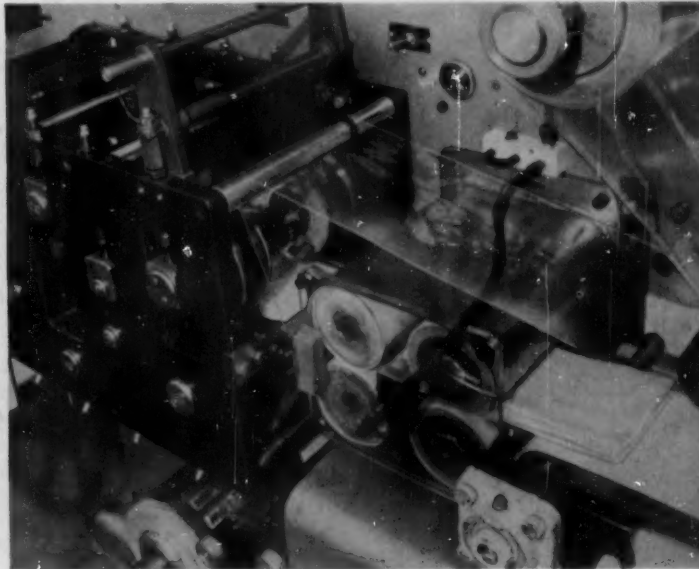
Schreiber has been running its machine more than nine months. More than a year ago the company instigated a search for such equipment, which was finally developed through a joint effort by Schreiber,

sliced natural cheese in package portions are placed on an in-feed conveyor and lined up with flights that travel next to the belt. This spaces the stacks at proper intervals for moving them into the gas chamber and then for feeding them onto a web of film to be in correct register at the cut-off knife station.

The gas chamber has two sets of very soft rollers, made of foam rubber with a neoprene covering. The first set of rollers acts as a door to the gas chamber, keeping out unwanted air, but being resilient enough to let stacks of cheese pass between



Resulting packages are smooth and attractive, protected for long shelf life because of absence of oxygen. Red Owl brand uses two webs of 450 cellophane coated with saran and polyethylene, one web printed. Berkshire uses polyethylene-coated foil for backing web.



Gas chamber (center, with nitrogen feed tube) contains two sets of very soft foam rollers which surround cheese stack (entering at right) and exclude air. End of chamber is enclosed in clear plastic. Plain film (fed from top) and printed film, from below, meet and enclose cheese and nitrogen at the second set of rollers. Sealing follows immediately in the unit at left.

a machinery manufacturer experienced in bag-making equipment and a package supplier experienced in cheese-packaging problems.

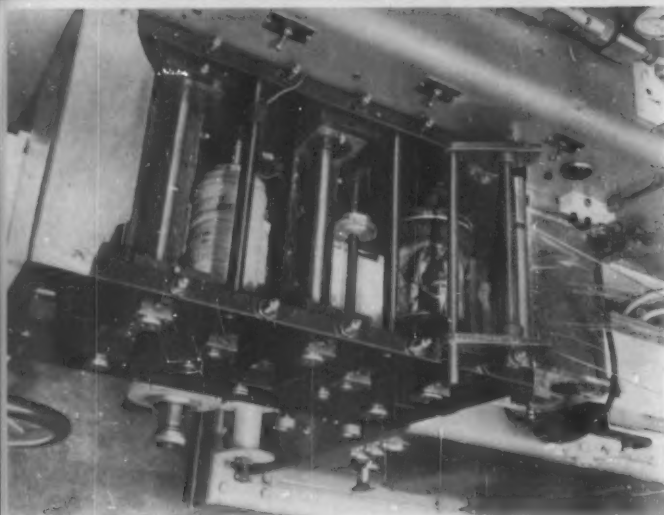
The machine is compact and easily turns out 32 packages a minute, the maximum speed of Schreiber's old semi-automatic line. The previous system used pre-formed bags which had to be hand filled and then fed by hand to a two-station evacuation and gas-flushing machine. The new automatic line has actually produced up to 48 packages a minute and additional refinements now being made may boost its potential productivity even higher.

The machine is simple in operation. Stacks of

the rollers without mashing the cheese out of shape.

The first set of rollers also moves the cheese through the nitrogen gas chamber, "passing" each stack to the second set of rollers which is positioned in the outgoing end of the chamber.

The film material used at Schreiber is 450-gauge cellophane, originally coated two sides with a saran resin (conventionally known as "polymer-coated cellophane") to which the converter has added a polyethylene coating on the under side for heat-sealing purposes. Two rolls of this material (or one of the film and one of polyethylene-coated aluminum foil) are located above and below the sealing area. These



Looking down into sealing mechanism. At right are side-seal wheels. Following it is first cross-seal bar and a soft roller which squeezes out excess nitrogen just as final cross seal is made, flushing gas back into following package. Cut-off knife completes the operation.

are threaded into the end of the gas chamber and are shielded to lock out oxygen-laden air. The stacks of cheese pass onto the bottom web of film in a constant nitrogen atmosphere within the chamber.

The top and bottom webs, with the cheese between them, are side sealed. At Schreiber's, the bottom web, on which the cheese travels, forms the top panel of the finished pouch and is flexographic printed in three colors.

As the cheese slices in their gas-filled tube of film move to the cross-seal and cut-off stations to complete the pouch-forming operations, they pass through another set of soft squeeze rollers. These rolls squeeze out excess nitrogen to form a flat functional package instead of a puffed pouch. Gas is forced back toward the gas chamber, setting up a counter-current gas flow that moves in the opposite direction of the packaging line and helps to eliminate oxygen content in the package.

The cross-seal crimper and cut-off blade work in tandem and operate in an eccentric motion that follows the speed and direction of the side-sealed webs. The male and female crimping heads make a wide, ribbed cross seal which, when cut through the center by the cut-off blade, forms the top seal of one pouch and the bottom seal of the following pouch.

The finished pouches are inspected as they move along the carry-off conveyor and are case packed for shipment.

The new machine has enabled Schreiber to make a notable improvement in its package opening, long a problem with cheese manufacturers. Old packages had a small "starter" slot cut into one side of the cross seal so the housewife could rip off the top of

the pouch. Schreiber's new pouch has a narrow polyester-film tear tape along one side which is formed as an integral part of the pouch during the side sealing operations. The housewife strips off this edge for easier removal of cheese and more convenient re-insertion of unused slices.

The company is packaging several natural cheeses: Swiss, Muenster, brick, Mozzarella, Provolone, Cheddar and Monterey. Schreiber's machine is set up to handle slices from 4 by 6 in. to 4 by 8 in., and it can be adjusted to handle smaller or larger sizes if necessary.

The present equipment accommodates one printed web, indexed for cut-off synchronization, and a backing web that can be random printed, opaque or transparent. A refined model now being completed will be equipped to run double print registration.

The Schreiber installation is furnished with several safety devices, such as a flashing red light that warns when gas pressure is dropping below normal or when the machine has been started without the gas being turned on.

The cheese manufacturer finds its new machine offers several other advantages:

► It is economical. For every thousand pre-formed bags the company formerly purchased for its old semi-automatic line, it saves between \$2.50 and \$3 on equivalent packaging [Continued on page 205]

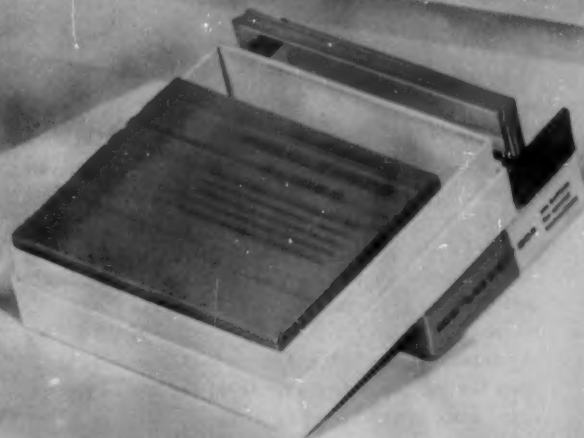
Credits: Machine manufactured by Roto Wrap Machine Corp., 241 William St., Englewood, N. J.; distributed by Marathon Corp., Menasha, Wis., and Conopac Corp., 120 E. 13 St., New York 3. Specially coated cellophane and foil materials printed and supplied by Marathon. Tear tape by The Dobeckmun Co., 3301 Monroe Ave., Cleveland 13, Ohio, using Du Pont Mylar polyester film.

Easy-open tear tape, made of tough polyester film, is a feature of Red Owl all-film pouches. Long side opening gives consumer easier access to contents.



A prize winning package by BURT

This handsome microscope-slide box, manufactured for the Erie Scientific Corp., Buffalo, won an award at the 1957 Set-Up Box Competition, sponsored by the National Paper Box Manufacturers Association.





Carton equipment guide

*Long-felt need is answered
by new loose-leaf manual
developed by a task force of
Folding Paper Box Assn. to guide
packaging engineers
in application of line machinery*

*By Patrick A. Toensmeier**

Bound to survive hard wear and new developments, the 120 pages of manual published by Folding Paper Box Assn. are held in a stiff, cloth-covered, loose-leaf binder of split-ring construction for easy insertion of new data pages as they become available.

The need for a concise manual of information on mechanical carton-handling equipment has become increasingly evident in the last several years. Use of folding paper cartons has tripled in the last 20 years. In the last 10 years alone, there has been a 40% increase in the number of cartons manufactured, bringing the current rate of usage to approximately 115 billion cartons per year.¹ One of the most significant factors in this tremendous expansion has been the corresponding growth in the use of high-speed carton-handling equipment.

Many existing types of cartoning machines have been re-engineered or modified to provide higher production speeds or greater size ranges than were formerly available. New types of cartoning equipment being developed at a rapid rate are performing

operations which would have been considered visionary five years ago. To the equipment specialist, the problem of keeping abreast of the new developments in mechanical cartoning has become complex indeed. To the non-specialist, interested only in developing a general background knowledge of cartoning methods, the obstacles were well-nigh overwhelming. There was no single source of either general or detailed information on the various types of cartoning equipment which are commercially available today.

To meet this need, the Folding Paper Box Assn. of America has published its new "Mechanical Cartoning Equipment Manual." The manual was compiled by Frank A. Chidsey, Jr., Container Corp. of America; Robert J. Hickin, The Ohio Boxboard Co., and this writer, serving as a task group of the association's Research and Technical Committee,

*Research Director, The New Haven Board & Carton Co., New Haven, Conn.
¹See "Folding Boxes," MODERN PACKAGING, April, 1957, p. 96.

with the cooperation of packaging-equipment manufacturers whose machines are included in the book. Design and layout of the manual were by Albert Kner and the Design Dept. of Container Corp. of America.

The manual was intended to be as complete as possible, as far as cartoning equipment is concerned, but certain specific categories of machinery were deliberately excluded. These are proprietary machines (i.e., machines that are specifically controlled by various carton manufacturers and are not freely available), machines for handling certain patented carton styles which are not available to everyone and highly specialized elements of packaging systems, such as fillers, conveyors, etc. The last group was excluded because these elements vary radically with the specific packaging situation; descriptions and specifications would be so general as to be useless or confusing. Equipment commercially available from established machinery manufacturers is the prime subject of this book.

The manual is bound in a multiple split-ring, loose-leaf-type binder. New pages can be readily inserted and it is presently intended that the task group that developed the basic information will remain active for several years to provide information on new equipment as it becomes available. There are six basic sections to this manual: an introduction, three sections on the various types of

equipment, an appendix and an index in which the various machines are cross-referenced by manufacturer.

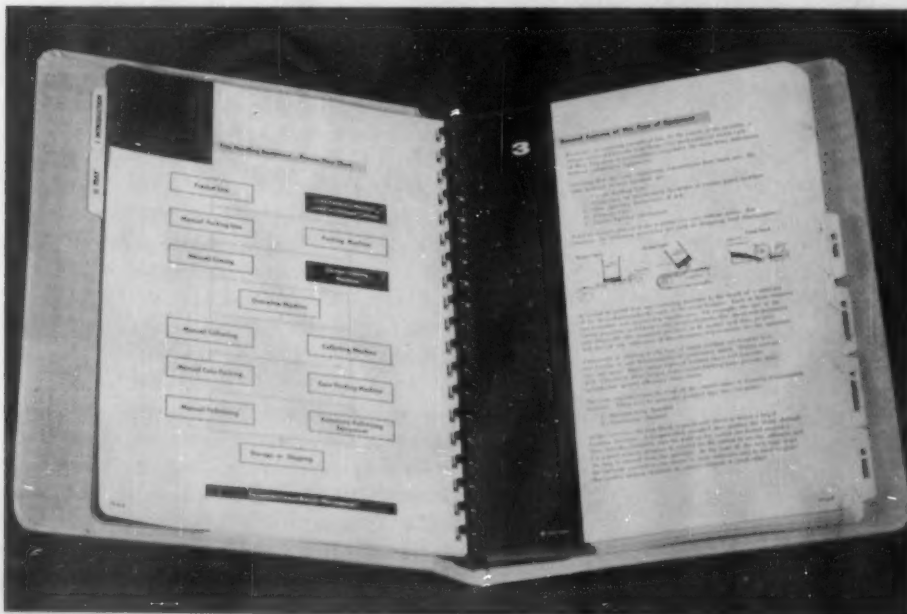
The introductory section discusses the scope and character of the information presented in the manual and provides general "ground rules" which should be observed in using it. The various factors that generally pertain to cartoning equipment are described in this introduction and there is a tabulation of economic elements that are important in cartoning operations.

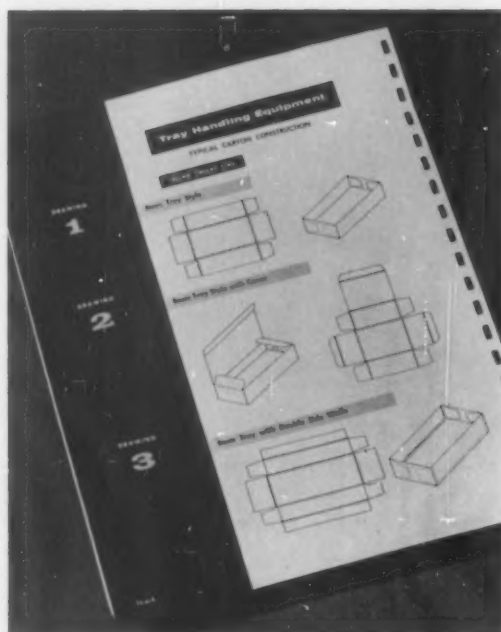
Various types of equipment covered in the manual are classified according to the basic style of carton that is formed, loaded and/or closed on each machine.

All folding paper boxes can be grouped into three major categories: tray styles, tube styles and specialty styles. The first two sections, covering tray- and tube-style equipment, also contain general background information on typical carton constructions; typical complete packaging lines in which equipment of this sort appears; general engineering features of these machines, and data sheets providing specifications and illustrations on specific machines. The section on equipment for handling specialty carton styles contains only machine data sheets, since there are no common or generally typical features for equipment in this category.

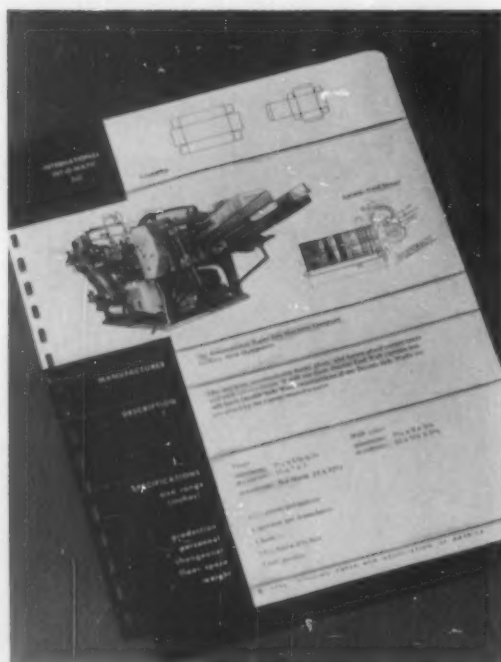
The appendix is designed to provide useful sub-

Quick reference to data on specific carton style is afforded by index tabs and color-coded pages of new manual. Listed by function in table of contents, machines are also indexed by manufacturer.





Non-specialist can learn background information on cartoning quickly with the aid of pages such as this, showing typical tray construction.



Finding equipment for a specific carton-handling job is facilitated by referring to the new manual's descriptions and illustrations of 83 different machines for various applications.

sidary information. For example, it presently contains a Carton Unit Production Chart. This chart provides production figures for widely different machine speeds through several periods of time. Conversely, it can be used to determine the number of machines operating at a given speed required to maintain a specific production level for any length of time. Charts providing similar information will be made available periodically, along with additional data sheets on new cartoning equipment.

Pages in each section of the manual are color coded and the sections are further divided by a tab-indexing system. Each machine data sheet is coded by a number which identifies it with respect to page position, manual section, manufacturer and a reference number assigned to the machine. To help prevent possible confusion, each machine data sheet shows at least one drawing of a typical carton style, handled by that machine, at the top of the sheet.

Uses for this manual are varied. It was conceived by the FPBA as an instrument of general education for the non-specialist and a reference guide for the technical specialist. Members of the folding-carton industry manufacture a product which is a highly technical industrial component. Cartons that are formed and loaded on high-speed equipment must be manufactured with all of the care and control that is normally associated with the manufacture of precision ball bearings. Non-specialists concerned with cartoning operations can acquire a good basic concept of the types of problems involved by studying the general background information included in the introduction and some of the other sections of the manual.

All good mechanical packaging programs are the result of careful planning and a study of the specific problems involved. A good packaging system can *not* be developed solely through the use of this manual. That can only be accomplished through detailed studies of the problem by the packaging-machinery manufacturer, the carton supplier and the manufacturer who will use the system. However, use of the manual can reduce considerably the amount of preliminary work required to locate the general types of equipment suitable for a specific problem. It will provide the manufacturer's own general specifications as to size range, production speed, personnel requirements, change-over time, floor space and weight. With this type of information, the non-specialist, the packaging committee or other personnel responsible for solving specific cartoning problems can quickly develop the proper areas for further exploration and eliminate those which would be fruitless to survey.

For the equipment specialist, the manual provides a survey of the [Continued on page 206]



1. Compact molded from BAKELITE C-11 Plastic is elegant, yet durable.



How 3 types of packaging
with BAKELITE Brand Plastics
protect the product, promote the sale

The beautiful finish, color, and printing of this compact inspire confidence in the quality of its contents. These results are characteristic of BAKELITE Brand C-11 Plastic, from which the package is molded. And C-11 keeps its smart good looks because the finish and color are molded in and will last as long as the package itself. It's easily wiped clean, is unaffected by oils and grease, and has good impact resistance. Specify C-11 for sturdy, handsome packages that protect the product . . . promote the sale.

(continued on next page)

**Protect the product,
promote the sale**

(continued)



Made-to-order for shampoo sales—a polyethylene squeeze bottle



No better material can be found for a shampoo bottle. Molded of BAKELITE Brand Polyethylene, this colorful container is pleasant to touch . . . easy to use . . . and stays soft and squeezable. It won't break if dropped, and is less slippery when wet, because of the bottle's surface and safety-grip design. Brand name is permanently molded-in with raised lettering, not applied, to help build brand loyalty and repeat sales. And Polyethylene's light weight saves on shipping costs.

2. One of America's favorite packages—the polyethylene "squeeze bottle."



3. Polyethylene coating gives these pouches a quick heat-seal.

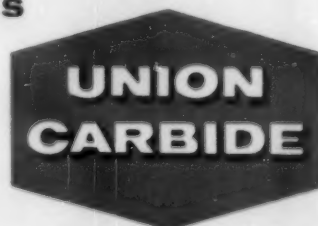
Polyethylene coating on foil seals in the freshness of dehydrated cheese dip


The contents of this package must be kept dry. Thanks to the combination of BAKELITE Brand Polyethylene and the foil, they will be. Colorless and inert to food, the polyethylene coating forms a quick, strong, heat-seal that keeps moisture out, flavor in. When the package is opened, out pours a fresh, full-flavored product, ready to mix with milk and serve. Polyethylene-coated packaging is ideal for a wide variety of products, including dry, powdered materials—food, chemicals, and soaps.

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The importance of character

Jewel Tea drops streamlined design of its tea cartons in favor of an Oriental atmosphere, reviving a dragon motif that was discarded five years ago

Design of the "modern" school may be out of place if it fails to convey the special character of a product. That is the thinking behind Jewel Tea Co.'s decision to redesign a group of its tea packages.

The new tea packages, used on the company's home-delivery routes, incorporate a design element that Jewel dropped five years ago—a fire-breathing dragon. Combined with this is a new thatched background motif further to suggest tea's Oriental origin.

The recently abandoned packages were overwrapped and printed cartons that ran in yellow and brown, or yellow and green; easy-to-read copy identified brand name and product contents. Chief drawback of the old design was that it did not connotate the product or its use. It also overplayed the brand name at the expense of variety designation.

Jewel faced an additional problem before arriving at its solution. Its new home-delivery tea packages had to be markedly different from those used for its retail-store outlets. This is necessary since there are many marketing areas in which home-delivery routes and retail stores are adjacent or slightly overlap. Marketing problems and concepts for each are different. Jewel's supermarket tea package, for instance, uses the technique of a split illustration on opposite sides of the carton to form one billboard design when two packages are grouped together. These packages have a silhouetted blue teapot against a yellow background.

For its new home-delivered packages the company considered many different designs and types of packaging materials. It decided to retain the triple-wrap materials of the former packages, which consist either of cellophane, folding carton and tea bags, or overwrapped paper, carton and inner waxed-paper liner.

Jewel dug into its files of past tea-package de-



Old and new packages for Jewel Tea Co. of Chicago are both easy to read. However, the old package design (left) could indicate almost any product and lacked strong color tie-in to aid product identification. New packages have an Oriental atmosphere suggesting tea's origin and the colors indicate type of tea (green for green tea and burnt-orange for orange pekoe and pekoe tea).

signs and took a second look at its packages of five years ago. This was a difficult-to-read, bright red and black carton that had a large green dragon coiled around a logotype. Jewel felt the dragon was a symbol that would quickly identify a tea package without conflicting with its retail-store packages.

The encircled logotype has been dropped, the dragon cleaned up and reduced in size. Colors are changed to a predominant green for green-tea packages and a predominant burnt-orange for black tea (orange pekoe and pekoe). Added to this color identification is the thatched gold and black background. The dragon runs in the green or burnt-orange color of the carton and is integrated into the color panel.

Credits: Cartons by Ace Carton Corp., 5800 W. 51 St., Chicago 38. Labels by Western Printing & Lithograph Co., 1220 Mound Ave., Racine, Wis.

Grandfather of new package design was this red and black carton with green dragon coiled around logotype. Dropped five years ago, dragon element was picked up and modified on new package.





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Methods

Engineering

Testing

Lined polyethylene bottles

A first report on polymeric linings, which give new hope to the two out of three products previously barred from squeeze bottles because of excessive permeation

By James H. Parlman and Jules Pinsky†*

Lined polyethylene bottles are now a commercial reality and the prospective plastic bottle user can take a new look at this package.

Ever since the commercial introduction of the plastic bottle in the mid-forties, end uses have been limited by its permeation characteristics. Some two out of three products considered for packaging in polyethylene bottles were found to be unsuitable because of permeation effects. These might take the form of excessive weight loss, odor or flavor change, and/or bottle distortion or greasiness. Obviously, this closed many interesting market areas to the container.

To overcome this obstacle, a program was instituted some years ago to develop bottle linings so that these many products could be packaged. By October, 1955, it was possible to present the first reports on this work. (1, 2).¹

Experimentation has proved that a number of different linings are necessary for effective packaging of any reasonable percentage of the previously unpackageable products and to give them practical shelf life.

Linings, formulated from various polymeric materials, are applied to the entire inner surface of the bottle, right up to the neck bead, so as to form an integral and inseparable part of the bottle. This bottle-within-a-bottle effect provides the necessary barrier action.

Linings are formulated to give a number of specific properties such as: good chemical resistance,

desired permeation properties, adhesion to the bottle wall, sufficient flexibility while squeezing the bottle and suitable processing properties.

In general, linings have been found effective for the following types of products, none of which can be commercially packaged in unlined polyethylene bottles:

1. Water-in-oil-base emulsions where collapse and greasiness must be eliminated. *Examples:* cleansing lotions and hair creams.
2. Mineral-oil-base liquids. *Examples:* baby oils, various pharmaceuticals, hair oils and other hair products.
3. Lubricating oils.
4. Products which have excessive odor and/or flavor loss. Certain types of the following provide good examples: shampoos, after-shave lotions, colognes, nasal sprays, cosmetic and pharmaceutical lotions, astringents and anti-perspirants.
5. Some organic solvent-base liquids which have excessively high permeation rates with regular polyethylene. *Examples:* cigarette lighter fluids, char-

This is the first laboratory report indicating the results to be expected with new interior linings for polyethylene bottles. The information as to formulations and processes is limited because some of the developments are so new that they are not yet protected by issued patents. However, it is believed that these data will be significant to packagers, pending more complete disclosures in the near future.—Ed.

*Technical Service Manager and †Chief Physicist, Flax Corp., Hartford, Conn.

¹Numbers in parentheses identify References appended.

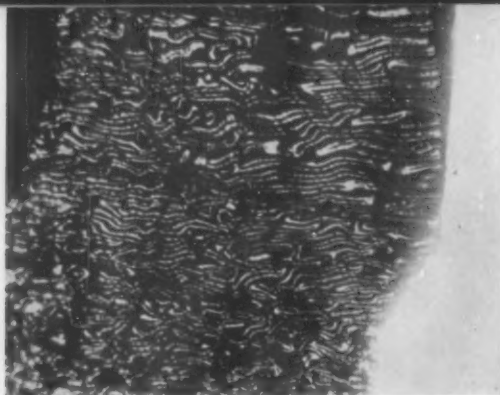


Figure 1. An "X" type liner after unmolding, shown magnified about 75 times. This photograph was taken looking down at liner in bottle section. Polyethylene shrinks during unmolding, but liner does not, causing characteristic wrinkles which help to identify the type of liner.

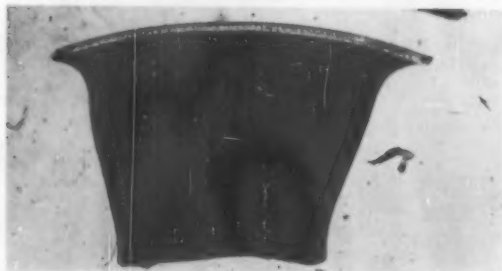


Figure 2. Cross-section views, magnified about 50 times, give a comparison of linings before and after unmolding. Above, "Y" type liner on opaque polyethylene before unmolding; below, the same type of liner after unmolding.

coal lighter fluids, shoe oils, paint products and fingernail polishes.

So far, linings have not been commercially offered for the following types of products.

1. Liquids containing appreciable percentages of low-boiling ketones.
2. Some of the suntan lotions.
3. Certain hair-waving lotions.
4. Some organic solvent-base cements.
5. Certain special flavorants.
6. Selected solvents such as diethyl ether and chloroform.

No liner has been found which significantly reduces water-vapor permeation.

During the years of lining development, bottles containing both proprietary items and common chemicals were subjected to a 28-day shelf-life test that correlates with full-year testing (3, 4).

For this 28-day test, 4-oz. Boston round lined bottles are usually used. The bottles are filled to the shoulder, capped and weighed once each week and the percentage weight loss per year is then calculated. Unlined bottles are included as controls.

In addition to the weight-loss test, the bottles are examined over periods of up to six months to determine bottle side-wall collapse, greasy outer-bottle surface, sticky outer-bottle surface and odor of product on the outside of the bottle.

A selection of these data, comparing results with lined and unlined bottles, is presented in Table I. Test results for 21 proprietary products (Items 1 through 21) and eight commonly used chemicals (Items 22 through 29) at temperatures of 73, 100 and 120 deg. F. are shown.

For most of the products in Table I, data are given for unlined and one or two of the five lining materials considered. It has been the practice to select only those liners for testing which are most suited to handle the particular product at hand. This practice is practical only where the problem of

Figure 3. Showing "Z" type liners magnified about 50 times. In photograph above, a cross-section view of natural polyethylene before unmolding. In the lower illustration: upper left, a cross-section view of natural polyethylene after unmolding; lower right, natural polyethylene after unmolding, looking down on the liner.

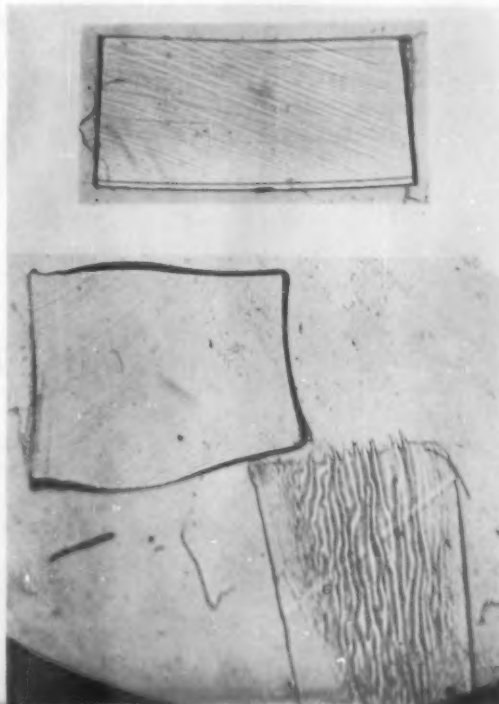


Table 1: Packageability data—lined vs. unlined polyethylene bottles*

Values are estimated % weight loss/year using 4 oz. Boston round bottles (except where otherwise noted), based on 28-day test measurements

Product description	Unlined polyethylene bottles			Lined polyethylene bottles														
	Control			Type "A" lining			Type "B" lining			Type "C" lining			Type "D" lining			Type "E" lining		
	°F.			°F.			°F.			°F.			°F.			°F.		
	73	100	120	73	100	120	73	100	120	73	100	120	73	100	120	73	100	120
1 Paint colorant	7.4		76				+0.03		2.1									
	Sr C		Sr C				Sl C		Sl C									
	Sl O		Sl O															
2 After-shave lotion (alcohol base)	4.6	10					2.0	6.9										
	0	0																
3 Cologne for men (alcohol base)	4.4	13					2.3	7.2										
	0	0																
4 Hair oil (three different oils)	+0.23		4.4							+0.27	0.65	+0.32	0.51					
	0		Sr O							Sl O	0	Sl O	0					
	Sl C		Sr C															
			G															
5 Hair product (water-in-oil base)	0.96	19								0.15	2.0		0.01	2.9				
	C	C																
		G																
6 Lighter fluid (cigarette)	400		>1,000							2.8		12						
	C		C															
	0		0															
7 Shoe oil	2.6		130							0.25	0.95	0.21	0.96					
	C		C									Sl C	Sl C					
	0		0															
8 Topical lotion (similar to calamine lotion)	0.51	4.2	7.3				0.22	2.1	5.1									
	G	G	crusty															
	Sl O	Sl O	outer surface															
			O															
9 Household lubricating oil (1¼-oz. oval bottle)	+0.02		0.81	+0.02		0.07				+0.03		0.05						
	C		C															
	0		0															
10 Penetrating oil (¼-oz. oval bottle)	2.4		15	+0.01		0.18				0.05		0.20						
	C		C															
	0		0															
11 Gun cleaning oil (1¼-oz. oval bottle)	2.4		14	0.08		2.3												
	C		C			Sl C												
	0		0															
12 Motor oil SAE 20 (1¼-oz. oval bottle)	+0.03		0.17	+0.02		0.05				+0.03		0.07						
	C		C															
	0		0															
13 Baby oil #1 (mineral-oil base)	0.11		26				+0.10		+0.83	+0.25		0.68						
	0		0									C						
	C		C															
			G															
14 Baby oil #2 (mineral-oil base)	0.009		0.90										+0.001		0.02			
	C		C															
			G															
15 Nail polish	120	360	600	0.03	1.6	6.1	1.8	9.6	25									
	C	C	Sr C															
	0	0	Sr O															

*C — bottle side-wall collapse, G — greasy outer bottle surface, S — sticky outer bottle surface, O — odor of product on outside of bottle, Sl — slight, Sr — severe.

Table 1 continued on following page

Table I (Continued from preceding page)

Product description	Unlined polyethylene bottles — Control			Type	Lined polyethylene bottles														
	°F.				Type "A" lining °F.			Type "B" lining °F.			Type "C" lining °F.			Type "D" lining °F.			Type "E" lining °F.		
	73	100	120		73	100	120	73	100	120	73	100	120	73	100	120	73	100	120
16 After-shave lotion (non-alcoholic)	0.73 O Sl C		18 O Sl C													0.40		16	
17 Hair oil (containing alcohol and oils)	1.3 S		18 S													0.92	6.3	12	
18 Charcoal lighter fluid	20 C		470 Sr C Sl O				0.14		6.9										
19 Analgesic lotion	7.6 Sl C O	25 Sl C O					0.49	2.3											
20 Nasal spray	1.1	4.2 Sl C	9.8 Sl C O				1.1	2.9	6.8										
21 Complexion cleanser (oil-in-water base)	0.2 O	2.2 O C	8.9 O C													0.22	2.0	6.6	
22 Turpentine, pure spirits of gum	74 Sr C O	470 Sr C O	1,400 Sr C O				0.69	2.2 C	12 C	0.51 C O	4.6 Sr C O	14 Sr C O							
23 Methyl salicylate (synthetic U.S.P.)	28 C O	130 C O	450 C O				0.41 Sl O	3.0 Sl O	10 Sl O										
24 Hexane	1,000 C						5.5		1.6										
25 Toluene	1,800 C	7,300 C					2.9												
26 Ethyl acetate	45	270					1.1												
27 Carbon tetrachloride	770 C	3,400 C		4.4 (1 qt. bottle)			4.7												
28 Eucalyptol U.S.P.	26 O Sr C						0.34	4.4		1.5 Sl C		0.71 Sl C							
29 Mineral oil, heavy	0.27 Sl C	1.7 Sr C	5.0 Sr C G				0.1	0.6	0.8	0.1	0.5	0.8	0.2	0.6	0.8				

Note: C — bottle side-wall-collapse, G — greasy outer bottle surface, S — sticky outer bottle surface, O — odor of product on outside of bottle, Sl — slight, Sr — severe.

packaging the product in unlined bottles can be described in full detail.

Table I contains data on both commercially available and developmental linings. It will be seen that a bottle lining can reduce the permeation weight loss by from 95 to over 99%. However, there are many instances in which the lining is extremely effective, yet actual weight-loss reductions are only moderate.

As an example of high weight-loss reduction, it will be noted that Item 18, a charcoal lighter fluid, loses 20% of its weight per year in an unlined bottle at 73 deg. F. Lining "B" reduces the permea-

tion to 0.14% per year. Side-wall collapse also is eliminated.

Item 2, an alcohol-base after-shave lotion, illustrates a case where weight loss, as such, was not the major consideration. In this instance, although the weight-loss reduction was only from 4.6% to 2.0% per year at 73 deg. F., lining "B" proved completely satisfactory, since it successfully reduced loss of certain of the perfume components in the lotion.

Another such example is seen in Item 8, a topical preparation similar to [Continued on page 208]

By Robert F. Dale*

Simplified micro-gas analysis

*Revised reaction chamber and improved methodology
are found to give more uniform results
in the testing of nitrogen-atmosphere pouches*

A micro-gas analyser in use at Red Star Yeast & Products Co. for about six years was described recently (1)†. The development of methods for producing gastight, nitrogen-atmosphere pouches in the flexible packaging industry emphasizes the need of a simple, accurate technique of determining the completeness of oxygen replacement. The apparatus and method originally described provided a quick and reliable analytical procedure for determining oxygen and carbon dioxide in gas samples of less than 3 cubic centimeters. Accuracy of the method was $\pm 0.5\%$ for either analysis.

The present report describes a revised reaction chamber and improved methodology resulting in further increased accuracy, although the initial construction is greatly simplified. This improved chamber and the slightly revised procedure have been in use at Red Star Yeast & Products Co. for determining the efficiency of oxygen displacement in active dry yeast pouches. Satisfactory results have been recorded for several months. The new chamber is a modification of the unit described by McMullen and Stark (2).

Details of construction of the chamber are shown diagrammatically in Figure 1; the complete micro-gas analyser is illustrated photographically in Figure 2.

Procedure

The technique is as follows:

1. Place 12 ml. of the proper absorbant [i.e., either 12 ml. of 30% KOH (for carbon dioxide) or 10 ml. of 30% KOH plus 2 ml. of 30% acid-pyrogallol solution (for oxygen)] in appropriate test tube and securely close with rubber stopper,

which has been located as shown in Figure 1, on bead-filled glass tube.

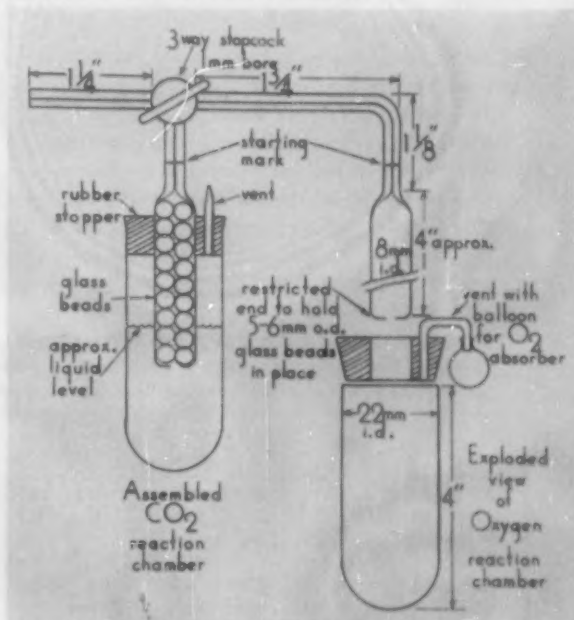
2. Adjust stopcock to connect chamber with burette and react trapped gas with absorbant by raising and lowering leveling tube to pass the gas back and forth from burette to bead chamber.

3. Lower leveling bulb until absorbant is raised to starting mark.

4. Repeat steps 1, 2 and 3 with second chamber.

5. Expel gas collected during these operations

Figure 1. Details of the construction and assembly of the modified reaction chamber.



* Director of Research Engineering, Red Star Yeast & Products Co., Milwaukee, Wis.

† Numbers in parentheses identify References appended.

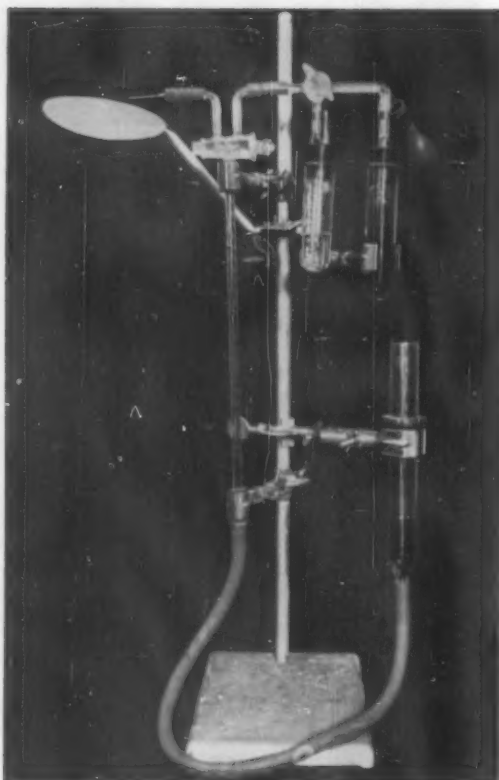


Figure 2. Photographic view of the simplified micro-gas analyser completely assembled.

and prepare to take samples by method described earlier (1).

6. After sample is obtained and measured accurately, set three-way stopcock in desired position and open burette stopcock to reaction chamber header. Be sure liquid level in leveling tube is at or above that in the gas burette before opening this stopcock.

7. Slowly raise and lower the leveling tube to pass practically all the gas from burette to absorption chamber and vice versa, at least 10 times. The number of passes required to absorb all the desired gas will depend upon the initial concentration of

this gas in the sample. Hence it is advisable to take an accurate gas-volume reading after 10 passes and then re-pass the gas to the absorption chambers two or three times before taking a new accurate gas-volume reading. If the first and second gas volumes agree within ± 0.01 ml., all the gas is removed and the volume obtained from the second reading can be used to calculate the quantity of gas present in the sample.

8. Calculate the per cent carbon dioxide and/or per cent oxygen in the sample as follows:

$$\% \text{ CO}_2 = \frac{(\text{original volume} - \text{volume after KOH})}{\text{original volume}} \times 100$$

$$\% \text{ O}_2 = \frac{(\text{volume after KOH} - \text{volume after pyrogallol})}{\text{original volume}} \times 100$$

* Incorrectly stated in original paper (1).

As in the first description of this analysis (1), it is advisable to determine the per cent oxygen on an air sample before each new group of analyses is made to be certain that the reacting chemicals are not spent. With continuous use, the chemicals charged to the oxygen-absorption chamber are sufficient to determine the oxygen content of 125 to 150 air samples and the carbon dioxide absorbant has an even greater capacity. Unfortunately, the full capacity of the oxygen absorbant cannot be realized because of oxygen absorption from the head gas outside the bead chamber and from diffused oxygen through the vent balloon.

Results

The results in Table I show good agreement between the values obtained with the original method and the present modification.

Following the first several months of use it became apparent that the revised apparatus and method were less susceptible to operator variability, hence the results of comparable production and/or samples were more uniform. This is quite desirable for a test procedure and it alone justifies the recommendation of the revised apparatus and method.

During the testing of the revised apparatus it became apparent that the glass-bead size was somewhat critical. If the beads are too small, probably less than 3-mm. diameter, they pack too tightly and trap gas within the bead bed. Beads of 5-6-mm. diameter will not pack, yet afford sufficient displacement to produce good gas-liquid mixing and ample contact surface.

References

1. Dale, R. F., "Micro-Gas Analysis," MODERN PACKAGING, April, 1956, pp. 135-137, 216, 217.
2. McMullen, J. J., and Stark, O. J., "Semi Micro Orsat Gas Analyser," Journal of the Assn. of Off. Agri. Chem., Aug., 1954.

Table I: Comparison of values obtained with original method and present modification

	Gas analysis by original method		Gas analysis with revised apparatus	
	% CO ₂	% O ₂	% CO ₂	% O ₂
Air first day	0.0	20.8	0.0	20.9
Air second day	0.0	20.9	0.0	20.7
Production—Pouch 1	0.0	0.4		
Pouch 2			0.0	0.0
Test pouch*	0.0	4.2	0.0	4.0

* After exposure of inferior, gas barrier lamination.

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Q Questions & A Answers

This consultation service on packaging subjects is at your command. Simply address your questions to Technical Editor, Modern Packaging, 575 Madison Ave., New York 22, N. Y. Your name or other identification will not appear with any published answer.

Improved polyethylene sealing

Q: *We are having a persistent problem of skips in our polyethylene heat seals. The material is a strong paper with a 1-mil resin coating. The seals are made coating-to-coating for the sides of a flat pouch. The outer surfaces are printed and dry waxed. The pouch-forming unit is new and we are sure the heat sealers are in good condition. The skips appear at random times and in any part of the seals.*

What do you believe is causing polyethylene to fail to seal under these conditions and what steps do you recommend that we take to overcome the problem?

A: Polyethylene coated on paper should make strong, continuous seals under the proper application of heat and pressure. It is apparent that there are spots or areas of an interfering substance on the surface of the resin and that this material is causing skips to occur in the sealing process.

There are many substances that can cause this difficulty. Excessive use of anti-offset spray in printing, the excessive use of silicones or similar release compounds in the coating process, or lubricating oil on a roller could interfere with polyethylene sealing. These substances could be reaching the resin coating in your pouch-forming equipment from the printing and coating operations.

However, the most probable cause of these skips is wax from the dry-waxing process. Wax could be transferred to the coated side of the material from unclean guide rolls in the waxing or slitting process. It is also possible that the wax was not cooled when the material was wound and thus offset on the polyethylene.

A careful investigation in both your plant and the converter's plant will show the kind and source of

this contamination. It should be a simple matter to correct the condition which has been causing the problem and insure the formation of strong and continuous heat seals for your polyethylene pouches.

Moistureproof cellophanes

Q: *How can we improve the moisture protection of a cellophane-wrapped tray? The package uses unprinted, heat-sealing cellophane and is generally satisfactory, but shows some moisture effects in humid summer weather. Can cellophane be treated or coated to make it super-moistureproof and, if so, how can this be done?*

A: Cellophane derives its moistureproofness and heat sealability from surface coatings of specially formulated resins generally applied as a lacquer. There are many grades of cellophane, each modified in some way for particular uses or for different classes of products. In the cellophane grades on the market today there is a wide range in the degree of moistureproofness of the coatings. You are apparently using a typical overwrapping grade, which is entirely satisfactory except when products are subjected to extreme conditions of humid weather.

Within recent years there have come into the market newer types of cellophanes developed for uses requiring a higher level of moistureproofness and certain other improved qualities. These newer cellophanes are slightly higher in cost than the older films, but the improvement in performance more than justifies the premium.

It would be expensive and require special handling if you were to have coatings applied to cellophane to improve its moistureproofness.

It is suggested that you contact your cellophane supplier and obtain samples of some of the polymer-coated grades available. A comparative test will quickly show if these

newer cellophanes will give the added moistureproofness your product needs for all-year protection.

Added protection of dual wrap

Q: *We are interested in the possibility of using a double overwrap on one of our packages. We are not sure about the difference in moisture protection by the use of two wrappers of waxed paper instead of one. Can you explain the difference?*

A: Theoretically, the use of two layers of the same moistureproof barrier will double the moisture protection. For example, if a waxed paper has a water-vapor transmission rate of $\frac{1}{2}$ gm., two layers of such a material will give a water-vapor permeability rate of $\frac{1}{4}$ gm.

However, because of the effect of creasing, sealing, etc., there could be a considerable difference between theoretical considerations and practical results. In the first place, there are two ways in which two wrappers could be applied. First, application of the two wrappers simultaneously so that the overlap and folds are made together. The other method would be to apply one wrapper, seal it and then have the package run through another wrapping machine. In the latter case, the seals would be separated and independent of each other. The latter method would probably give somewhat greater moistureproofness, although the simultaneous application of two wrappers would probably be nearly as good and less expensive to apply.

It should be a relatively simple matter to run a group of samples using both a duplex and two independent wrappers, and to test these under controlled humidity conditions against packages with a single wrapper. Such a test would give you practical and comparative results of what would happen in the package and you could determine whether the results would be justified by the additional cost involved.

PRODUCT PROTECTION



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Du Pont CEL-O-SEAL Bands

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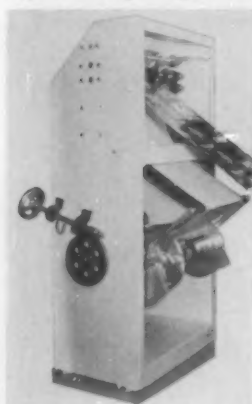
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BETTER THINGS FOR BETTER LIVING . . . THROUGH CHEMISTRY

Equipment and materials

New automatic flying splicer

The Butler Automatic Machine Co., Monson, Mass., has developed a new automatic splicing machine for high-volume packagers that reportedly increases productivity with no increase in labor or material costs.



The new BAM splicer integrates with overwrap machines such as Package Machinery Co.'s "FA" and "FF-H," Battle Creek and similar machines. It attaches by splicing a new roll of wrapping material to the depleting roll at the last full printed panel of the depleting roll. Splicing is done in registration, without the presence of an operator and without stopping the wrapping machine, according to the supplier.

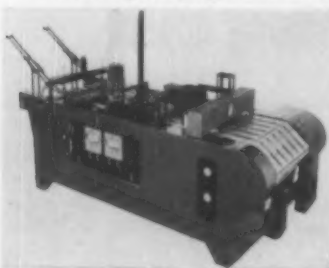
The operator is required only to replenish roll supply. Operating speed is from 15 to 160 lineal feet per minute. Materials handled are cellophane, wax paper or foil. The unit handles web widths of from 3 to 20 in. Web cut-off is from 3 to 12 in. Maximum roll diameter handled is 15 in. The splicer is secured to the floor on adjustable feet and can be elevated from 3 to 6 in. to provide easy access for cleaning.

Foam plastic trays and platforms

The Polyfoam Packers Div. of Glo-Brite Products, Inc., 6415 N. California Ave., Chicago, has developed packaging trays and shipping platforms of polystyrene foam plastic, designed especially for use in protecting plated finishes of electronic parts and similar products from oxidation. Glo-Brite fabricates the Polyfoam platforms to customers' needs with pre-punched and milled recesses to receive the parts with minimum labor costs on assembly or shipping lines.

New line of blister-pack machines

Packaging Industries, Ltd., Inc., 151 Pine St., Montclair, N. J., has announced a new line of blister or bubble packaging machinery. The automatic



Sentinel Blistomatic model illustrated uses a pre-formed blister made of polyethylene, acetate, butyrate, vinyl, etc., automatically fills them, places a printed coated board on top,

heat seals and automatically ejects them at speeds as high as 150 to 200 per minute. As many as six different blisters, each containing a different product, may be packaged at the same time, the company reports. Two

different types of blister materials, each having its own heat-sealing cycles—for instance, three blisters of acetate and three of polyethylene—may be used at the same time, each containing a different product. A semi-automatic unit suitable for low production, sampling and market testing is also available and may be had on a rental basis.

New anti-corrosion tablets

A corrosion-resistant atmosphere is created around any ferrous-metal object packaged in a closed container with new "VTi" tablets, according to the manufacturer, Al-Con Chemical Co., Box 8168, New Orleans, La. One tablet is sufficient to protect 30 cu. in. of enclosed space for periods up to three years, depending on the type of container, seal and storage temperature, according to the company. The tablets, based on a vapor-phase inhibitor manufactured by the Shell Oil Co., are designed for protective packaging of small parts such as dies, tools, gauges, drills, gears, fishing tackle, pins, needles, razor blades, screws, bits, instruments, micrometers, etc.

New vacuum-forming, skin-packaging unit

An improved new model of their Meteor vacuum- and drape-forming machine, which is also practical for skin packaging, has been announced by Comet Industries, 9865 Franklin Ave., Franklin Park, Ill. The machine forms all thermoplastics from 0.001 to 0.250 and can be used for production, test work, models, short runs and laboratory work. Improvements include form-draw to 15 in.; automatic heating cycle; heating capacity adjustable through percentage input controller; rapidly adjusted clamp frame; new design clamp frame that eliminates plastic pull-out on all thicknesses, and infra-red rod-type heaters. The new model comes in three standard sizes: 20 by 30 in., 30 by 36 in. and 36 by 60 in. Other sizes can be custom built to requirements.



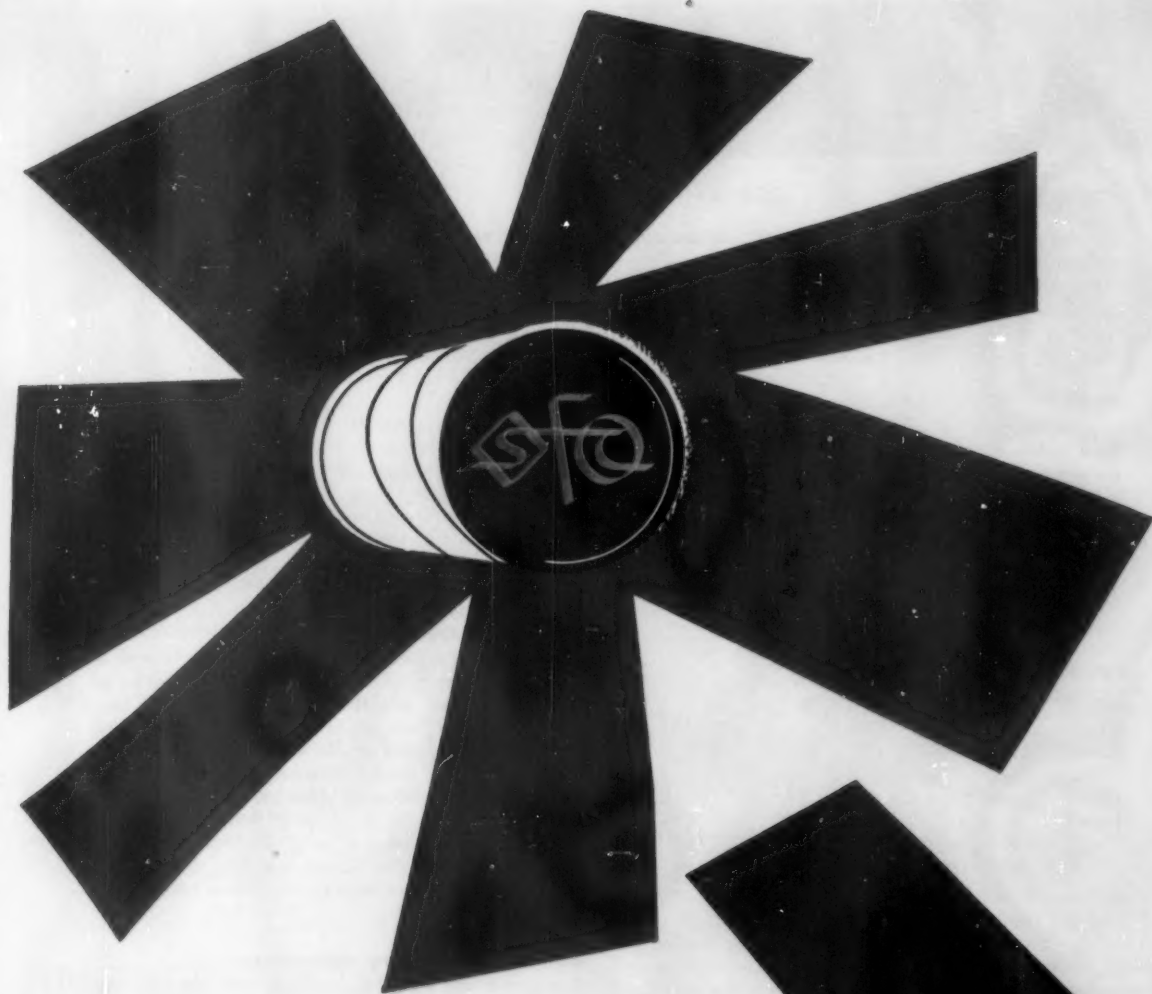
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Pneumatic tensioner-cutter for strapping

A new portable air-powered stretcher and cutter for heavy-duty strapping, developed by the Brainard Steel Div., Sharon Steel Corp., Griswold St., Warren, Ohio, weighs only 12 lbs., half the weight of most heavy-duty power tools, yet reportedly can process more than 2,000 tons of strapping a month—an increase of 100%. The new "PNC" tool has been specially designed for heavy-duty strapping on pallets, skids, car bracing and large bundles, and is said to achieve a high degree of tensional uniformity on steel banding. The tool can be used on any flat stock or flat package. Its use eliminates operator fatigue, making the tool more produc-

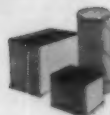




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Equipment and materials

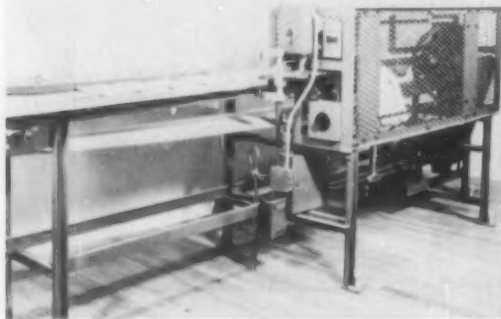
[Continued from page 156]

tive during work shifts, and its rugged construction minimizes down time for maintenance.

Brainard has also announced a new air-powered tool for tensional strapping, the PNE stretcher, which is reported to be faster, lighter and quieter than conventional power tools. Available for all tensional widths— $\frac{3}{8}$ -, $\frac{1}{2}$ -, $\frac{5}{8}$ - and $\frac{3}{4}$ -in. straps—the tool is adjustable to all gauges in the widths it handles.

New automatic sealer and trimmer

An automatic sealing and trimming machine for products packaged in polyethylene bags is being offered by the Carbert Mfg. Co., Inc., 144 Moody St., Waltham, Mass. This new machine forms a hairline continuous



seal and trims off excess polyethylene beyond the seals at speeds of from 600 to 800 in. per minute, according to the company. The Model 1010 illustrated features a horizontal conveyor, a simple backstop member which is the only adjustment required for bag-size change-over and an electric-eye device which permits the bag to be sealed right up to $1/32$ in. of the contents, making a neat, snug, contour package. Standard equipment will seal bags 4 by 4 in. up to 12 by 12 in. Larger sizes can be accommodated with only a conveyor width change. The machine occupies a floor area of only 30 in. wide by 12 ft. long; conveyor height is 36 in.

New polyethylene resin for thermoforming

E. I. du Pont de Nemours & Co., Inc., Wilmington 98, Del., has announced a new polyethylene resin, "Alathon" 31, designed for use in making heavy sheet for thermoforming. It reportedly has a viscosity high enough to resist sagging during preliminary heating, yet is still easily extruded into sheet and shaped into finished parts when drawn down over the thermoforming mold. Parts made of the new material are said to have glossy surfaces and to be resistant to stress cracking. Suggested uses for the material are for thermoforming containers for foods such as ice cream and cottage cheese, and also trays, covers, liners, etc.

Du Pont's Film Dept. has announced a new thing-a-gauge, polymer-coated cellophane with improved durability and appearance characteristics. The new 300-gauge K-203 cellophane, still in the experimental stage but expected to be available soon, is reported to be especially suitable for the candy industry.

New square-shaped, glass liquor bottles

A square-shaped bottle designated for general trade use by the liquor industry is this new 4/5-qt. glass container currently being made available by the Hazel-Atlas Glass Division of Continental Can Co., 15 & Jacob Sts., Wheeling, W. Va.

The company reports that mold equipment for the production of this new bottle has just been completed and that the graceful design of the new container shape has already had favorable acceptance by the distilling industry. Mold listings are now being scheduled by the company.



Silicone treatment for soft-drink bottles

A new silicone protective treatment which is said to reduce breakage of soft-drink and dairy bottles by as much as one-half, enabling bottlers to maintain high filling rates, has been announced by the Dow Corning Corp., Midland, Mich. Syl-Gard 17 is a liquid concentrate suitable for instant dilution in water. It comes in "one-shot" bottles of 8 fl. oz. which, when mixed with water in an 8- to 15-gal. spray fluid tank, supplies sufficient solution for a day's production on a single filling line. The new treatment is said to make bottles more resistant to abrasion and keeps them new looking longer.

New window bag for mattresses

A mattress bag with a transparent polyester film window has been introduced by the Bemis Bro. Bag Co., 408 Pine St., St. Louis 2, Mo. The new bag permits



customers to view easily such details as label, ticking and mattress edge construction, and also serves to simplify warehousing and inventory taking for the retailer. Called Visi-Matt, the bag is made of one or more plies of rugged kraft paper. The 4-by-8-in. window, made of DuPont's Mylar polyester film and securely anchored to the kraft, is as strong as, or stronger than, the bag itself. The bags may be had with colored kraft outer sheets and with multicolor brand printing. The company suggests the bags for other hard-to-merchandise items.

Four new packaging papers

The Mosinee Paper Mills Co., Mosinee, Wis., has announced the availability of four new packaging papers. The "NeverMold" line permanently resists biological deterioration, according to the company, and has been accepted by the Armed Forces for long-term storage of Ordnance and Signal Corps equipment. "Scrimtex" has a reinforcing scrim or mesh of either fiberglass or rayon introduced into the sheet on the paper machines. This adds strength in all directions and re-

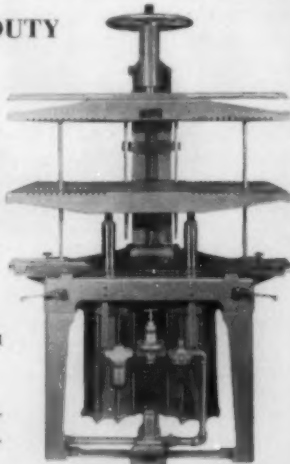


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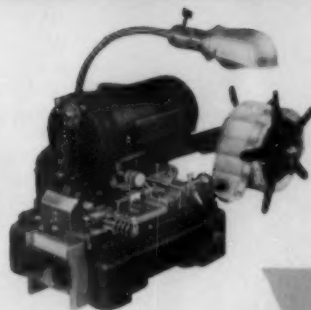


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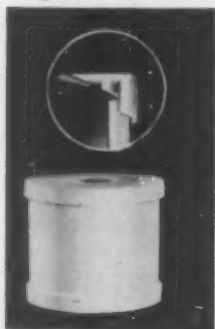
Equipment and materials

[Continued from page 158]

portedly gives the paper unusually high puncture resistance. "Seven-O," developed by Mosinee in cooperation with the Navy Department, is a chemically inert paper which reportedly conforms to Specifications MIL-P-17667 and MIL-P-116C. "Hydensel" is a very high density paper developed as a replacement for glassine and greaseproof papers where those items are over-designed for the specific application and is recommended as a liner in food packages and as a release sheet for wax, rosin, etc.

New line of molded polyethylene jars

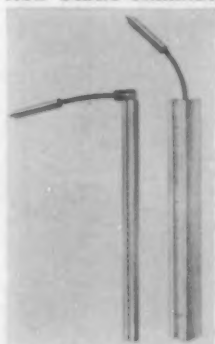
The American Agile Corp., 5461 Dunham Rd., Maple Heights, Ohio, has announced its new line of all-



molded polyethylene jars, available in 1- and 2-qt. and 1-gal. capacities. Jars are made of either conventional branch polyethylene or linear polyethylene. Their interlocking cover design reportedly makes them 100% leakproof. Cover construction, plus the 3/16-in. walls, retards exposure of moisture to contents, according to the company. Other features claimed for the jars are non-permeability; maximum rigidity

plus protection against failure whether handling or storing liquid, semi-solid or solid materials; ample reinforcement around the bottom chime for maximum impact resistance.

New static-eliminating bar



The Simco Co., 920 Walnut St., Lansdale, Pa., has added a new general-purpose static bar, called the Super Service, to its line of static-eliminating equipment. Square in cross-section and totally encased, the new static bar is reported to have maximum neutralizing efficiency and requires no maintenance other than an occasional brushing or blowing off of the points. Its construction permits nothing to fall inside the bar to short circuit it internally. The bar comes in two cross-sectional sizes: 5/8-in. square in short and medium lengths up to 60 in., and 1 1/4-in. square in spans up to 12 ft.

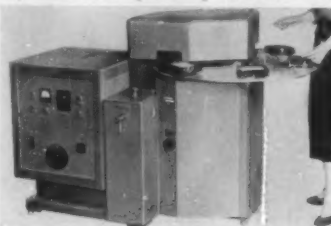
New conveyor for bag packers

Non-stop production and automatic coordination of a vibrating bag packer with a sewing machine are said to be provided by a new jack-belt conveyor announced by Richardson Scale Co., Van Houten Ave., Clifton, N. J. The new conveyor, according to the company, assures that any temporary interruption of the sewing process will not bring bag packing to a standstill. The

unit has a center distance of 3 1/2 ft. between the pulleys, permitting close placement of sewing machine to scale. Belt speed is 75 ft. per minute.

New blister-pack sealing machine

A new high-speed, automatic machine called the Clear-Pac Bubble Sealer, developed by Erdco Engineering Corp., Addison, Ill., bonds transparent plastic bubbles to display cards for merchandising hardware, soft goods and granular products. The sealer, 4 ft. wide and 6 ft. long, is reported to be easily operated by unskilled help. Its dielectric heating speed can be adjusted to produce from five to 20 sealed packages per minute. Bubbles can be made to a maximum 6-by-9-in. size. Change-over for package size reportedly can be accomplished in only three minutes.



New aerosol metered valve and container

Emson Research, Inc., 118 Burr Ct., Bridgeport, Conn., is now offering a combination of the Emson metered valve, plus engineering design facility for aerosol containers incorporating the valve. The valve, reportedly adaptable for all present aerosol containers, is pre-measured in manufacture for exact dosage, from 50 mg. to 3 gm. The company claims that it is the only metered valve that can be pressure filled.

Adhesive for polyethylene packaging

An adhesive announced by Adhesive Products Corp., 1660 Boone Ave., New York 60, is reported to adhere polyethylene easily to paper, chip or kraft board in the manufacture of envelopes, bags and boxes, as well as adhere labels to polyethylene bottles. Called No. 3679-H Polygriptex, it is made from a flexible polymer which will not crystallize, according to the company, and has good shock resistance and aging qualities.

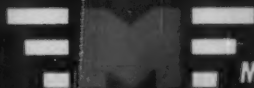
Snap-open polyethylene caps

White polyethylene "Snap-Caps" which snap open with pressure of the thumb and provide a tight reseal, no matter how many times they may be used, are now



a feature of the line of Plastainer vials for pharmaceutical products, produced by the Plastics Division of Owens-Illinois Glass Co., Toledo 1, Ohio.

The new Snap-Caps are designed to combine maximum protection with consumer convenience. Polystyrene vials on which they are used include five sizes—SP-13, SP-9, SP-7, SP-5 and SP-3—suitable for capsules, tablets and pills. Packages have reinforced

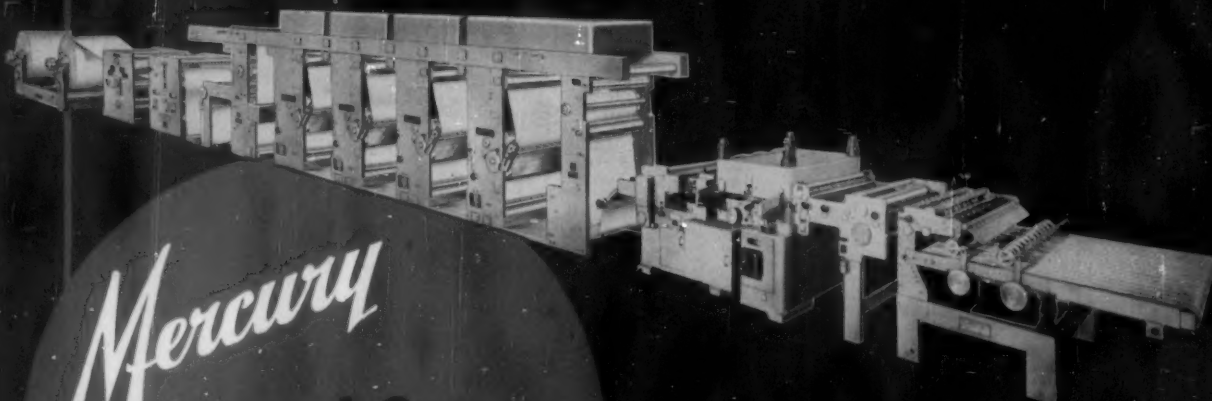


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Equipment and materials

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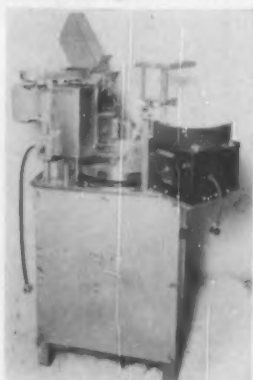
openings for extra strength, added resistance to cracking or splitting, and larger-diameter openings for easier filling. The vials are specially treated to assure label adhesion.

Printing attachment for rewinding machine

A single-color, flexographic printing unit designed for attachment to any paper, film or foil winding machine has been introduced by Adolph Gottscho, Inc., 6 Evans Terminal, Hillside 5, N. J. The unit is made in widths to 72 in. and printing repeats to 24 in. It is powered by connecting it to the variable-speed main drive of the parent machine.

Cartridge filler-capper-sealer

A new machine for the filling and capping of disposable cartridges has been announced by the Ampoule



Machine Co., 38-09 24 St., Long Island City 1, N. Y. In the spinning of aluminum caps, the company states, difficulties are encountered because of the variations in the formation of the tooled end of the glass. This machine has forming tools that do not close in at a predetermined position, but follow around the contour of the shoulder on each individual cartridge. This, the company claims, insures a leakproof seal.

The unit has an automatic feed from magazines to the turret. The turret has 36 square holes which allow for exact positioning when cartridges are retained in the vee of one corner. Operating speed of the machine is 60 per minute and all exposed parts are made of Type 304 stainless steel.

Versatile new printing machines

Raised, round, recessed, concave, convex or flat objects can be printed by a new machine announced by the Cosom Engineering Corp., 6012 Wayzata Blvd., Minneapolis 16, Minn. The Cosomatic printer prints on three different levels simultaneously in one, two, three or more colors by letterpress or offset on objects paper thin or up to 5 in. thick, 12 in. wide and 18 in. long. The unit, reportedly economical and fast, can be used for package printing, parts identification and labeling. It handles plastics, metal, wood, glass or paper items. Speeds up to 8,000 pieces an hour are claimed.

New name for plastic industrial tape

General Tape Corp. St. Paul, Minn., has announced that its new industrial tape made of polyethylene and cellophane will be merchandised henceforth as "Rajah." To increase dimensional stability under atmospheric changes, polyethylene content of the transparent tape has been boosted to 60% as opposed to 40% cellophane. Widths of $\frac{3}{8}$, $\frac{1}{2}$, $\frac{3}{4}$ and 1 in. are

now available in the 2,592-in. commercial-length rolls. The rolls come in a heat-sealed pouch made of polyethylene, foil and paper inside a folding box.

New shipper-merchandiser for berries

A new package for shipping and marketing of fresh strawberries, called the Bas-Kit, is being offered by the Fruit & Produce Packaging Co. Div. and the Rice, Trew & Rice Co. Div. of Inland Container Corp.,



Indianapolis 6, Ind. Basically, the design is a self-locking paperboard tray with an ingenious snap-on, easy-carry metal handle, so engineered that any number of individual trays can be quickly and compactly unitized to meet the needs of any marketing situation.

The trays are available in 8- and 12-pt. sizes and in 8- and 12-qt. sizes. The same design has been adapted to accommodate soft fruits such as peaches. The Bas-Kit is adequately ventilated and tests are said to indicate quicker cooling of berries than in other types of containers. The printed trays can be arranged into effective retail-store display. Cost of the new container is reported to compare favorably with most other types. Freight saving is also a benefit, since weight for each 24-pt. unit is 37% lighter than comparable wood crates. The company has made Government-supervised trial shipments with the new container, for which patent application has been made.

Improved, larger parts-feeder and counter

Size range of parts that can be handled by the Hoppermatic high-speed parts-feeder and counter made by U. S. Engineering Co., 40-24 22 St., Long Island City 1, N. Y., is extended with the new, larger, 20-in. machine. This versatile machine, which handles a variety of items such as nuts and bolts, tablets and capsules, die-cast parts, candies, etc., operates at speeds up to 200,000 parts per hour. Improvements include a longer discharge track, larger opening for hopper, larger hopper, ability to sustain heavier loads and accommodate multiple tracks.

New narrow-armed carton clamp

Closer stacking of cartons and resultant better utilization of valuable storage space are advantages claimed for the new carton clamp of narrow-arm design announced by the Yale & Towne Mfg. Co., 11,000 Roosevelt Blvd., Philadelphia 15, Pa. The clamp's articulation is accomplished through the deflected metal construction of the arm that eliminates bulky articulation arrangements on the outside of the arm. Made of aluminum, the clamp has a range of 22 to 68 in. Clamp pad can be built with pad reach up to 54 in.

Multiple-head pneumatic stapler

A new stapling device announced by Container Stapling Corp., Box 247, Herrin, Ill., mounts as many heads as needed in a series to drive several staples simultaneously. The machine is equipped with a manifold con-



Window box by Warner Brothers, Bridgeport, Conn., for Seaforth, Inc.

For Men Only!

Sure, it's as masculine as a briar pipe. But it's ladies, bless 'em, who sell Seaforth (much of it) and ladies who buy much of it!

Double reason for Seaforth's new high-style combination lotion and deodorant package. Tough, clear as crystal, Kodapak Sheet serves as a window... displays the product—protects it from dust, dirt, finger-ing... keeps it looking like a million—clean, fresh, salable! Stores like to handle it because it shows itself.

Have you a package that needs more point-of-purchase "oomph"? "Kodapak Sheet makes good merchandise sell better." Call our representative or write.

Kodapak Sheet

Kodapak™ trademark for Eastman's plastic sheet

**MAKES GOOD MERCHANDISE
SELL BETTER**

Cellulose Products Division, EASTMAN KODAK COMPANY, Rochester 4, N. Y.

Sales Offices: New York, Chicago, Atlanta. Sales Representatives: Cleveland, Philadelphia, Providence. Distributors: San Francisco, Los Angeles, Portland, Seattle (Wilson & Geo. Meyer & Co.); Toronto, Montreal (Paper Sales Ltd.).



Put your product in
a transparent bag
and give it

IMPULSE SALES POWER!

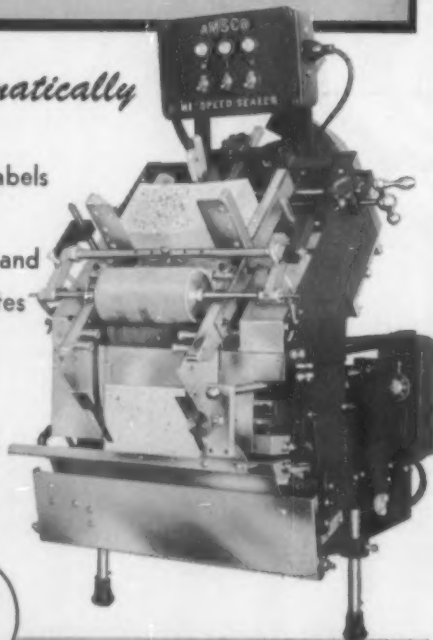
Here is the low-cost packaging
machine that makes it possible

The **AMSCO** BAG SEALER/ LABELER

Automatically

- seals
 - header-labels
 - imprints
 - punches and
 - code-dates
- the bag!

Write Dept. MP-7
for descriptive
literature



AMSCO PACKAGING MACHINERY, INC.
31-31 49th Avenue, Long Island City 1, N. Y.
REPRESENTATIVES IN PRINCIPAL CITIES

Equipment and materials

[Continued from page 162]

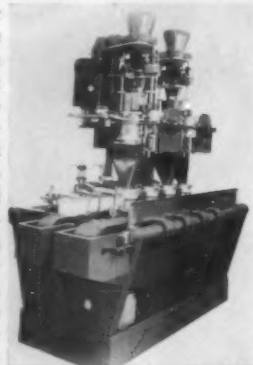
necting plate and an automatic lubricating system that eliminates hand oiling. It is operated solely by compressed air at a minimum of 60 psi. The multi-head stapler is designed especially for companies shipping products in long overlap cartons and telescope boxes.

Anti-rust pouches made of vinyl

The anti-rust properties of a vapor-phase inhibitor have been coupled with heavy-gauge vinyl to produce a new line of pouches and covers with rugged handling qualities by the Westvil Co., Inc., Westport, Conn. These "RusToppers" are reported to protect valuable metal tools, guns and other metal equipment against rust for years. In making these covers and pouches, a concentrated solution of Shell Oil Co.'s VPI is deposited on the vinyl's cotton-nap backing. Bags and pouches can be equipped with zippers and made to size and shape of customer requirements.

New automatic net weigher

The B. F. Gump Co., 1325 S. Cicero Ave., Chicago 50, has announced a new model Bar-Nun "Auto-Check" net weigher, designed for installation in multiple units in high-speed can lines—including the can moving, timing and packing equipment. The equipment is available in eight sizes, automatically to feed, weigh-fill, pack and eject cans to closing-machine conveyor at speeds of from 15 to 145 per minute. The new Series No. 100 machines are equipped with a power feed that is said to enable them to weigh most dry powered and granular materials—even very fine, pulverized products—with extreme accuracy. Approximate weight range of the standard weigher is 8 oz. to 2 lbs. This new series of net weighers is also available without can-line equipment, for manual filling of any type of container, or for application to automatic packaging lines handling cartons or bags. Illustrated is a two-unit Model 102.



Vacuum former for newer-type plastics

Newer types of plastics with superior physical properties, difficult to form on ordinary vacuum-forming equipment, are reported to be easily formed with the new Pressure-Vac machine developed by the Auto-Vac Co., 1984 State St. Ext., Bridgeport 5, Conn. The new machine is said to be a distinct departure from conventional vacuum-forming equipment in that it utilizes pressures up to 10 atmospheres in addition to vacuum. Packages are made from polyester, oriented styrene, high-density polyethylene, cast acrylic, nylon and extruded, rigid polyvinyl chloride. The company believes that the machine has opened the way to visual packaging of foods which may be refrigerated, then cooked in the original container, all at very reasonable costs.

New wonder adhesives solve 18 major sealing problems



Seban is the long-needed answer to these costly sealing problems—and many more! **1.** Poor bonding to impervious surfaces; **2.** Excessive foaming in glue pot; **3.** Excessive glue pot build-up; **4.** Too critical a film thickness; **5.** Extreme stringing; **6.** Rate of set too fast or too slow; **7.** Insufficient or excessive penetration; **8.** Improper tack range; **9.** Poor water resistance; **10.** Short shelf life; **11.** Unightly squeeze-out; **12.** Blistering; **13.** Poor bond stability; **14.** Unpleasant glue line odor; **15.** Mold development; **16.** Arduous glue pot clean-up; **17.** Short pot life; **18.** Lack of, or too much pliability.

Don't send for samples of SEBAN because, like any specialists you call on, Armour can't prescribe until we know your problems. However, once we know your needs we can recommend a grade of SEBAN for the job. Send this coupon now for further information about SEBAN adhesives!

ARMOUR

Adhesive Division

Armour and Company • 1355 West 31st Street • Chicago 9, Ill.
Delaware and Spring Garden Streets • Philadelphia 23, Pa.
66 Locust Street • South Boston, Massachusetts
120 Broadway • New York 5, New York
Lincoln Highway and Jacobus Avenue • Kearny, N. J.
235 South Hamilton Street • High Point, North Carolina

Seban is an extraordinary new line of polyvinyl resin packaging adhesives. Though new on the market, it has been tested on machinery you use and under actual packaging conditions similar to your own. In every case, Seban did a superior sealing job.

Every one of the many grades of new Seban can be modified to meet any known specific requirement. Send today for further information on amazing Seban!

MAIL FOR FURTHER SEBAN INFORMATION!

Send me Seban data for these operations:

447

Materials bonded _____

Machines used _____

End use _____

NAME _____

TITLE _____

FIRM _____

ADDRESS _____

CITY _____

ZONE _____

STATE _____

Armour Adhesive Division, 1355 West 31st Street, Chicago 9, Ill.

Plants and people

Sun Chemical Corp., Long Island City, N. Y., has contracted to purchase the Bensing Bros. & Deeney Co. of Philadelphia and all its subsidiaries. BBD will continue under its present name as a division of Sun Chemical and will retain its current management. The acquisition is expected to enable Sun Chemical to offer a more complete ink service, while the new division can avail itself of Sun Chemical's manufacturing, distribution and research facilities.

Richard W. Dando has been named as general manager of Sun Chemical's Geo. H. Morrill Co. division, manufacturer of newspaper printing inks. Mr. Dando has been with Sun Chemical since 1935.

Riegel Paper Corp., New York, has arranged to acquire the plant and equipment of the former Amos Packaging Div. of the Amos-Thompson Corp. of Edinburg, Ind. Riegel plans to equip the plant to produce the packaging materials presently being made at its Milford, N. J., plant and will operate the facility as the Edinburg plant of the Riegel Paper Corp. The bag-making equipment acquired by the purchase is to be disposed of, since Riegel does not contemplate entering that field. Allan Stone is being retained as plant manager.

John B. Shields has joined Riegel as product engineer and will work in the New York packaging materials department.

John B. Bowman, vice president in charge of sales for Ekco-Alcoa Containers Inc., Wheeling, Ill., has been elected a director of the company.



Bowman

Dan Jette has been assigned to cover Ekco-Alcoa bakery accounts in the Chicago area. On the West Coast, Jack A. Fox has been assigned to the San Francisco area, while Art Swanson is handling bakery accounts in Los Angeles. In the New York office, Tom Leo is now bakery accounts representative for the middle Atlantic states and parts of New York State. Ekco-Alcoa is to be represented in eastern Ohio and western New York by Sol Blum & Sons, Cleveland, Ohio.

Vacuum Forming Corp., Port Washington, N. Y., recently became part of Emhart Mfg. Co. of Hartford, Conn. Key personnel of the former company are now with Emhart's Henry & Wright Div. in Hartford where the line, identified by trademarks VacForm and VacTrim, is now being manufactured.

The cellophane plant being constructed near Tecumseh, Kans., by E. I. du Pont

de Nemours & Co., Inc., Wilmington, Del., is expected to be completed ahead of schedule and will be in operation at the end of 1958. In addition to the 50 million pound capacity of the new plant, Du Pont plans to increase the capacity of its existing cellophane plants by 30 million pounds a year.

Sutherland Paper Co., Kalamazoo, Mich., has appointed Gordon Dilno sales planning director. His responsibilities will include advertising, product development and public relations as well as the new marketing research section. Robert Thek has been named to head the new market research section, under Mr. Dilno. Clifton T. Wilson and Rex Paxton continue to serve as advertising manager and public relations manager respectively. William Nash has been made sales manager of Sutherland's new folding carton division, while George Gard has become sales manager of the specialties division.



Dilno

Aluminum foil is now being rolled on high-speed mills at Kaiser Aluminum & Chemical Corp.'s new aluminum production center on the Ohio river at Ravenswood, W. Va. Two new 60-in. mills roll up to 3,000 fpm in strips as wide as 56 in. at different gauges. Two other mills, including a 72-in. one designed to roll metal at speeds up to 4,500 fpm in widths of 66 in., are expected to be in operation by early next year.

Donald Deskey Associates, industrial design consultants of New York, have opened a second European office at Toldbodgade 71, Copenhagen, Denmark, which will function in cooperation with the Danish firm of Sigvard Bernadotte & Acton Bjorn, industrial designers. At the same time, the Danish concern has taken offices at 630 Fifth Ave., New York, and will work in association with the Deskey firm.



Warner

Bradford G. Warner, vice president and general manager of the Warner Bros. Co. Box Div., Bridgeport, Conn., has announced plans for expansion of the division by the addition of lithography to the present exclusive letterpress operation. A new Miehle two-color offset printing press is expected to be in operation by November and three additional colors will later be added to the press.

Stallort of Pa., Inc., Norristown, Pa., aerosol packagers, are now known as Thomasson of Pa., Inc. J. W. Bamp-

ton has become president; J. J. McElroy, Jr., treasurer; Thomas M. Hyndman, Jr., secretary, and David R. Bagenstose, vice president and general manager.

Patrick Coyle has been named executive vice president of Edgar Steiner & Co., Inc., New York research organization. Mr. Coyle was formerly general manager of Forbes Research, Inc.

American Can Co., New York, recently opened Detroit's first plant for the exclusive production of beer cans. Operations at the new facility, which turns out 500 cans a minute, coincides with production of the 60-billionth beer can made since 1935, when Canco introduced the first metal container for beer and ale.

D. C. Hunter has been assigned to manage Canco's Arlington, Tex., plant, replacing C. E. McCloskey, who has taken over management of the firm's New Orleans plant.

Bradley Container Corp., Maynard, Mass., a Canco subsidiary, has appointed Howard K. Gray as sales engineer in the firm's New York office. M. Walthall Turner has been assigned to represent Bradley in San Francisco.

A new sales office has been opened by Bradley Container in the Philadelphia area to facilitate customer service in Delaware, Pennsylvania and southern New Jersey. Located at 1 Wynnewood Rd., Wynnewood, Pa., the new office will serve as a regional office of the company's New York district. Harold M. Hansen has been transferred from New York to Philadelphia as sales engineer in charge of the new office.



Meditz

Walter J. Meditz has been appointed vice president for manufacturing by Standard Packaging Corp., New York. Mr. Meditz has been assistant to the president since 1955, when he joined the company. Prior to that, he was with Boyle-Midway, Inc., New York.

Robertson Paper Box Co., Inc., Montville, Conn., has appointed David W. Kimball as sales service manager for the Montville plant, covering the New York area. William O. Bennett has been named purchasing agent and Gerard E. Fitzgerald is now sales promotion manager. James R. Merritt has joined the company as a sales engineer in the New York office.

Plasti-Skill, 102-06 37 Ave., Corona 68, N. Y., a new firm recently formed by Nick George, will specialize in the manufacture of plastic models and cast-

*"200,000 more
Monday!"*



Hinde & Dauch
produces corrugated boxes
in large volume quickly
and economically.
Better see H & D,
authority on packaging.



HINDE & DAUCH

Subsidiary of West Virginia Pulp and Paper Company

14 FACTORIES • 42 SALES OFFICES

One of America's largest box producers

Fish sticks sparkle

Crystal-clear trays, formed of Plax **POLYFLEX 100**, provide a perfect showcase for frozen fish sticks, helping Frionor convince customers of their superior quality—at a cost comparable to packaging that lacks appetite appeal.



Dairy products appeal

Transparent lids of **POLYFLEX 110** protect the goodness and demonstrate the quality of dairy and delicatessen foods. Dimensionally stable, tough, non-toxic; — these lids are low in cost.

POLYFLEX® WORKS WONDERS IN FOOD PACKAGING

Good foods deserve **POLYFLEX** packaging. Its crystal clarity and bright sparkle unveil quality, tempt appetites. Safe in direct contact with foods, moisture-proof, tough and stable under radical temperature changes, **POLYFLEX** is economical, too — costs less than other plastics that lack its versatility. It may be just what your product needs. We will be glad to provide samples and properties charts and to help turn your ideas into profit-making realities.

Hot meals in machines

Formed and sealed dishes of clear **POLYFLEX 100** are winning favor for machine-vended hot meals. These **POLYFLEX** servers stand freezer storage and heating to standard serving temperature of 158°F.



POLYFLEX by PLAX

PLAX CORPORATION • P. O. BOX 1019 • HARTFORD, CONNECTICUT

Plants and people

ings, and production molds. The company will also develop ideas for vacuum-formed packaging.

K. G. Hewitt has been named manager of trade relations for the blown and tubular products division of Kimble Glass Co., subsidiary of Owens-Illinois Glass Co., Toledo, Ohio. G. A. Mounier takes over Mr. Hewitt's former position as sales manager of the container and accessories department.

The Atlanta sales office of Owens-Illinois has been moved to Suite 510, West Peachtree Bldg., 1330 W. Peachtree St., Atlanta, Ga.

Mosinee Paper Mills Co., Mosinee, Wis., recently completed installation of a tropical testing chamber for papers and has also installed two 100-ton silos for storing high-density pulp.



Small

R. E. Small has been advanced to the position of vice president for sales by Paper Converting Machine Co., Green Bay, Wis. Mr. Small, who had been sales manager since 1952, joined the machinery manufacturing firm more than 10 years ago.

Mullen Container Corp., Chicago, has appointed Ellis Johnson as assistant sales manager. He was formerly with Hazel-Atlas Glass Co. and Imco Container Corp.

Peter Muller-Munk, industrial designer of Pittsburgh, Pa., will represent the United States on an international jury judging industrial products entered by the Benelux countries in the Signe d'Or competition in Brussels, Belgium.



Paul

Thomas J. Paul has been appointed to direct a new sales development program for Niagara Lithograph Co., Buffalo, N. Y. Mr. Paul was formerly with N. W. Ayer & Son, Inc., Philadelphia advertising agency, and C. A. Swanson & Son, Omaha, Neb., a subsidiary of Campbell Soup Co., where he was division manager.

Howard Flint Ink Co., Detroit, Mich., has opened a new plant at 2501 Southwest Blvd., Kansas City, Mo. Flint Ink Corp., a subsidiary, has taken over the rotogravure and flexographic ink factory of Ben-Mont Papers, Inc., at Bennington, Vt.

At the new Meriden, Conn., corrugated box plant of The Hinde & Dauch Paper Co., Sandusky, Ohio, Emil H. Berges is serving as district sales manager, while Ralph Q. Centola is in charge of

WAX LAMINATED GLASSINE...FOR

Moisture Control



Moisture control is a highly critical problem in the packaging of many food products. An excellent example is the packaging of brown sugar where loss of moisture can cause a severe caking problem. Solution to this problem is economically found in a laminated Rhinelander paper using a micro-crystalline wax as the laminant. Not only is a superb moisture barrier provided but the flexible nature of the laminate makes it possible to maintain this moisture barrier despite severe creasing of the sheet. We would be pleased to send you samples of wax-laminated paper for your particular application.



RHINELANDER PAPER

Rhinelander Paper Company, Rhinelander, Wisconsin

Subsidiary of St. Regis Paper Company

GLASSINE—bleached unbleached colored transparent opaque window envelope wax-laminated heat sealing coated or tailor-made to fit your requirements GREASEPROOF—bleached unbleached laminated wet strength transparent tracing and transparent manifold parchment grades PAPERS FOR—corrugation lamination bag conversion window envelopes printing

you
can
**Pack
Anything with**



**SUPERIOR CUSHIONING
PADS & BLANKETS
and save money, too!**

PROTEX pads and blankets give you the maximum interior cushioning protection obtainable and fit virtually any product or assortment you can name! The cost is substantially lower than most other forms of interior cushioning and take only a fraction of the time to pack. Avail yourself of this important money-saving clean method of packing. The protection your products get is superb...resists all forms of shock and protects the finish of the product as well. Ease of packing, availability of ample supplies of packing material on hours notice are important too...you don't have to order far in advance of production or store supplies all out of proportion to their rate of consumption.

Consult us!—Present your packing problems to us for complete package engineering design and service by experts. We will show you how to improve package performance, and save money too!

WRITE, WIRE, OR PHONE US

AMERICAN EXCELSIOR CORPORATION

1000 N. Halsted St., Chicago 22, Illinois

NATIONWIDE SALES & DISTRIBUTION

Plants and people

plant production, Charles L. Gillespie has been named office manager.



Hunter

Henry H. Hunter has been appointed director of public relations for Olin Mathieson Chemical Corp., New York. R. Carter Dye has been promoted to general sales manager for the Olin Aluminum division. Dr. John H. Truesdail, plant manager of the Pisgah Forest, N. C., plant of the firm's Film Div., was recently awarded the honorary degree of Doctor of Science by the University of Redlands.

Robert E. Fittin, formerly with Olin Mathieson Chemical Corp., is now director of marketing for Inlander-Steindler Paper Co., Chicago. He will also direct marketing for Inlander-Steindler's two subsidiaries: Packaging Corp. of America and Wm. A. Iden Twine & Cordage Co.

Stanley Ellis of Marathon Corp., Menasha, Wis., has been re-elected chairman of the advertising committee of the Waxed Paper Merchandising Council.



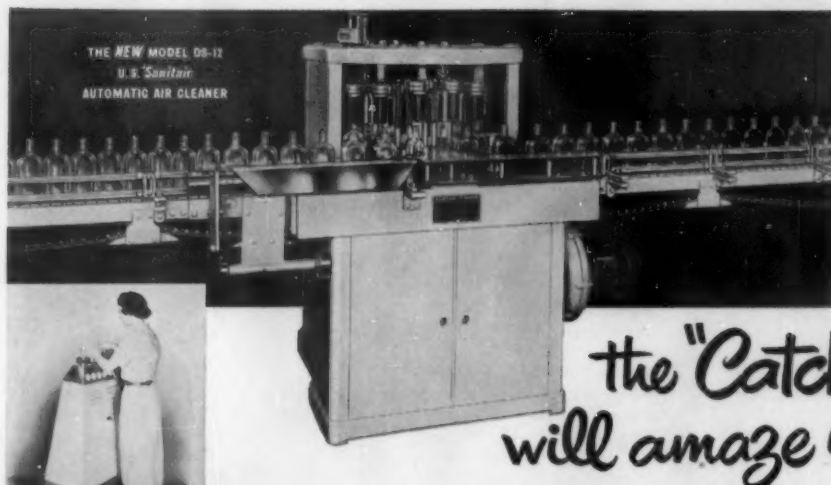
Moran

Herb Shelly, Inc., Farmington, Minn., package advertising division of Brown & Bigelow, has appointed Hamilton Moran as executive vice president and sales manager. H. Erich Illich has been made vice president and Ray Rauhauser is now assistant secretary and assistant treasurer of the organization.

The Gardner Board & Carton Co., Middletown, Ohio, has announced plans for a \$7,500,000 expansion program to create additional and improved facilities at the company's Middletown and Lockland, Ohio, plants.

Dr. Henry R. Erle has been made a director and medical consultant for Dyn Corp., Cliffside Park, N. J. Walter E. Erle is now executive vice president in charge of production for food and drug packaging and Walter M. Goldman has been named office and traffic manager. John Tochermann is now responsible for the automatic packaging and engineering departments.

The new \$1,750,000 corrugated box plant established at Little Rock, Ark., by Hoerner Boxes, Inc., Keokuk, Iowa, was formally dedicated recently. Feature of the event was a full-length movie, "Chain Reaction In Arkansas," promoting Arkansas industry and produced by Hoerner in co-sponsorship with its local and national business associates. The



THE NEW MODEL DS-12
U. S. Sanitair
AUTOMATIC AIR CLEANER



THE E-Z TWO-TUBE
AIR CLEANER. Containers
inverted over air valves,
two at a time, up to 40 per
minute. Blows carton lint,
dust, etc. out of new con-
tainers; any size or type.
Send for the E-Z Bulletin.

the "Catch"
will amaze you!



OF COURSE your containers are clean . . . they usually come to you in cartons. Yet, to be sure, run them through a U. S. Sanitair and be amazed at the "catch" of dust, carton lint, etc., from supposedly clean containers.

Throughout the packaging world, the U. S. Sanitair is widely adopted as the sure sanitary precaution. Many find it essential to product

uniformity; to safeguard the material content of their products; or as a precaution against failure of aerosol valves.

Built in models of varying capacities with container size changeover. Handle all size container openings including AGST, wide-mouth and aerosol-valve finishes. Send for the "Sanitair Bulletin" now.



U. S. BOTTLERS MACHINERY CO.

4017 North Rockwell Street

Chicago 18, Illinois

BOSTON • NEW YORK • PHILADELPHIA • SAN FRANCISCO • LOS ANGELES
SEATTLE • DENVER • PORTLAND, ORE. • OGDEN • JACKSON, MISS. • KANSAS CITY
TUCSON • ATLANTA • HONOLULU • SANTIAGO • SAO PAULO • MONTREAL
TORONTO • VANCOUVER • WINNIPEG • TOLEDO (EXPORT)

FOR RINSING any size or shape bottles or jars. The U. S. Rotary Rinsers clean both insides and outsides of containers. For water, steam or air. Send for the Rotary Rinsers Bulletin.



SPECIALISTS IN LIQUID FILLING AND CONTAINER CLEANING EQUIPMENT

NEW

DIFFERENT

YOU BE THE JUDGE—
YOU TELL US IF IT'S BETTER



New RAJAH tape combines cellophane with tough clear polyethylene—and offers a superior transparent tape with the best qualities of both.

- Greatly reduces breakage problem
- Longer life — doesn't dry out or crack
- Stays stuck even in freezing cold
- Shrink-proof — no adhesive ooze after applied
- Resists liquids — oil, grease — fats, water
- Often replaces costly acetate tapes

Best of all — more economical than old-style cello tapes



CHECK YOUR TAPE SUPPLIER OR

GENERAL TAPE CORPORATION
8735 1st National Bank Building
Saint Paul 1, Minnesota



Distinctive Plastic Containers

J-E invites your inquiry on semi-rigid plastic packaging designed to give your product maximum sales appeal at the point of purchase.



- EVERY SHAPE AND SIZE
- ALL PLASTIC OR COMBINE
- WITH OR WITHOUT DECORATION
- FAST DELIVERY

J-E PLASTICS MFG. CORP.

555 WEST 23rd STREET, NEW YORK 11, N. Y.
ORIGIN 5-6789

PACKAGING PERFECTION

beyond measure
NIEMAND BROS.
TUBULAR PAPER PACKAGES

There's a difference between NB packages and others you can buy. Sometimes you can't see this difference—or even measure it. But when you put NB packages to work, their finer qualities become something you can measure in dollars and cents of extra sales. Fine base materials, craftsmanship treatment of these materials, and only top-quality standards of manufacture are the basis of this extra performance. And, beyond this, is an unmatched experience in fine package making.

Relied on by manufacturers the country over...frequently specified by product designers—NB packages will lower your costs and speed up sales, all along the line.

When you try them, you'll see the difference. Like to see it today? Write for information!



NIEMAND BROS., INC.

Manufacturers of Paper Tube Products

37-01 Thirty-Fifth Avenue
Long Island City 1, N. Y.
RAvenswood 8-0909

Plants and people

Hoerner Foundation has established a scholarship at Hendrix College, Conway, Ark., for children of the company's Arkansas employees.



Mears

Edward L. Mears has been appointed to the newly created position of general manager of the Container & Specialties Div., of the Dewey & Almy Chemical Co., Div. of W. R. Grace & Co. Mr. Mears, who joined the firm in 1930, will supervise the sales, research and manufacturing activities of the division.

Richard S. McClurg has been named project manager of the new petrochemicals plant which is being constructed at Bay City, Mich., by The Dow Chemical Co., Midland, Mich.

The Baltimore and New York sales area and personnel of H. S. Crocker Co., Inc., San Bruno, Calif., have been combined under a central Eastern Seaboard Administration with headquarters in New York. Douglas J. Scott has been named to head the consolidated operations as regional manager. A new office has been opened in Philadelphia to serve the

Scott

Pennsylvania area, with Al Trico in charge. The Baltimore sales staff is moving into new quarters there.

A new packaging subsidiary has been formed by Crompton & Knowles Corp., Worcester, Mass. The new wholly owned subsidiary, Crompton & Knowles Packaging Corp., will have headquarters at Holyoke, Mass. The parent company has purchased the business of Klear Plastic Products Co., Quakertown, Pa., and the Russell line of can-handling equipment from interests in Plant City, Fla. Management of the new subsidiary will also coordinate the activities of Wrap-King Corp., packaging-machinery producer acquired by the parent firm in 1955. Officers of the new subsidiary are: Frederic W. Howe, Jr., president; William W. Anthony, Jr., executive vice president and general manager; Edwin H. Schmitz, vice president for sales; James Barringer, treasurer.

Endura Corp., Quakertown, Pa., has appointed Atlantic Pulp & Paper Corp., New York, as its exclusive sales representative in the New York and New England area.

William E. Hughes has been appointed special projects engineer in the Washington Div. of Container Laboratories, Inc., New York. He will be concerned

Seals·Labels·Tags

Specialists
in
Foil

by
CAMEO



VALUABLE



CONTENTS

DEMAND

THE FINEST

IN PROTECTIVE

PACKAGING

Manufacturers of all types of tin, tin-coated,
aluminum, lead, and Sheffalloy tubes.
To give your product a container that is safe,
sanitary, lightweight, smart and convenient
—specify SHEFFIELD. It pays to use the best.

*Product of The Sheffield Tube Corporation
Established 1850...Finer packaging from a century of experience
Home Offices and Factory New London, Connecticut
Sales Offices • New York • Chicago • Los Angeles*



SHEFFIELD TUBES

Plants and people

with services performed for Government agencies and for private firms dealing with the Government. Roy H. Cooley has been named to represent the firm in the Seattle, Wash., area.

C. F. Lohse has been promoted to director of sales personnel and training



Lohse

Fox

by Crown Zellerbach Corp., San Francisco. A. L. Fox is now assistant director of marketing services, while C. M. Pettit has taken over Mr. Fox's previous

post as manager of sales promotion and advertising. A. M. Ringel and W. R. Rosen have been named administrative assistants to the assistant vice president for marketing services.

Lester T. Radcliff has been assigned to a new sales territory in the Michigan area by Brockway Glass Co., Brockway, Pa., to handle sales to food, beverage, prescription, drug and chemical, beer, wine and liquor industries. He will headquarter at the company offices in Detroit.

Waldo G. Bretson has been appointed vice president and general manager of Mid-States Gummed Paper Co., Bedford Park, Ill. Frank W. Humphner, formerly general manager, is on temporary sick leave.

R. F. Hobbs has joined the sales staff of Kraft Bag Corp., New York. He will handle multiwall bags and Kraftpacker open-mouth-bag filling machines in northern Ohio and Michigan, working from the firm's Chicago office. Robert T. Smith is handling similar products as sales engineer for Alabama and western Tennessee from headquarters in Birmingham, Ala. R. A. Kurlander has been transferred to Kraft Bag's main office and will cover New York State and New England for the sale of multiwall bags and the Kraftpacker.



Vickers

C. W. Huflage is now vice president of sales for Cochran Foil Co., Louisville, Ky. R. D. Vickers has been promoted to general sales manager and W. R. Cory is now foil division sales manager. J. B. Gage and J. E. Bouhl have been named sales managers of the sheet and laminating divisions, respectively.

Dean P. Stout has been appointed general manager of sales for the Gair Containerboard & Kraft Paper Div. of Continental Can Co., Inc., New York. Clifford C. Moth has been named as-

FLUORESCENT INKS...

for dynamic packaging
and
point-of-purchase
displays

Bright, glowing fluorescent inks snap-up your packages and point-of-purchase material—help to present your product more dramatically.

This striking display package, prepared for the A. C. Gilbert Company, nationally famous manufacturers of microscopes and chemistry sets, employs fluorescent inks to full advantage. The crisp, neat printing is a tribute to ABT's mastery of the difficult technique of printing with fluorescent inks.

ABT letterpress and offset printing methods have proved successful in many point-of-purchase and packaging applications, including ABT's expert printing and die-cutting of paperboard displays and heat-seal or latex blister pack cards and boxwraps.

And you'll find the same sharp, neat results when ABT prints your booklets, manuals, catalogs, advertising materials, or plastic sheets in one to five or more colors.



Write today for more detailed information.

ABT LITHOGRAPHERS, INC.

INDUSTRIES, INC.

RT. #1, BRANFORD, CONN.

TEL. Hubbard 8-2539

MULTI-COLOR, MULTI-LEVEL PRINTER NEW COSOMATIC PRESS

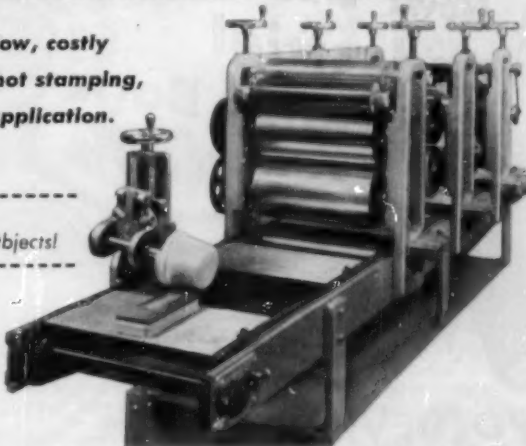
Eliminates slow, costly
silk screening, hot stamping,
labeling or decal application.

Rotary Attachment
Prints on Circular Objects!

AVAILABLE in 3 standard
models or in special sizes
and models to suit produc-
tion needs.

Now you can *print* many items never before possible. The Cosomatic Press prints either letterpress or offset on three different levels—up to three different colors,

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LOWER PRICES**

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LARGE FLAT
AND SQUARE
BAG MACHINE**

- General Information**
- Ideal for heavyweight papers and deep tuck bags.
 - Makes a wide range of shipping container bags, container liners, laundry bags, waxed garbage bags, etc.
 - Can be equipped with pneumatic feed rollers, mill roll lifter.
 - Farval lubrication and seam paste extruder.
 - Range—6¼" x 15" up to 23" x 37½".
 - Direct-connection for flexographic web press.

Write for samples and complete details.

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Designers and manufacturers of equipment for Bag Making, Printing, Coating, Laminating, Gluing and Labeling.



How will you have your package inserts? Long, Short, Wide . . . 1, 2, 3 or 4 colors? Carey's flexibility meets any service and quality demand at substantial savings. The reasons: round-the-clock operation, unique roll-fed presses, inventory roll stock and sheeting equipment. That's why top firms depend on Carey. Why wait for deliveries when you can call Carey Press . . . ask for Art Friedman, Sales Manager, CH 4-1000.

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PACKAGE INSERTS
PACKAGE INSERTS
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PACKAGE INSERTS



CAREY PRESS CORP. • 406 WEST 31st STREET • NEW YORK 1, N. Y.

Plants and people

sistant sales manager for the Egg-Safety department of Continental's Gair Box-board & Folding Carton Div. to replace the late Fred Haller.

Jerome Kurtz has been appointed technical service engineer by Ferro Chemical Corp., Bedford, Ohio, a subsidiary of Ferro Corp.



Bensing Plunkett

Bensing Bros. & Deeney, Philadelphia, has appointed Robert H. Bensing as eastern sales manager for the Flexographic Printing Ink Div. John B. Plunkett

kett is now assistant eastern sales manager and director of purchasing for the division.

E. Walter Miller has joined William W. Fitzhugh, Inc., West Hempstead, N. Y., as corrugated sales representative in the Easton, Pa., area.

Inland Container Corp., Indianapolis, Ind., has purchased a 35-acre tract of land in Chicago, where it plans to construct a large, modern corrugated box plant.

John W. Locke has been appointed by Arvey Corp., Jersey City, N. J., as sales administrator for the firm's Jersey City Mounting & Finishing Div., which makes point-of-purchase display materials.

James Rainey has been named district sales manager for the U. S. south central district by Yale Materials Handling Div., The Yale & Towne Mfg. Co., Philadelphia, Pa. He will headquarter in Chicago.

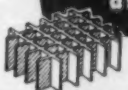
John Strange Carton Co., Menasha, Wis., has appointed William A. Allerton as general sales manager, to replace William Strange, now in charge of product development.

The Cottrell Co., Westerly, R. I., a subsidiary of Harris-Seybold Co., has commenced a program to expand the marketing of its equipment to the paper, foil, film and boxboard converting industries. Equipment includes high-speed rotogravure printing presses, slitting and rewinding machines which Cottrell imports and sells here for the Goebel Co., Darmstadt, Germany. Richard W. Rosebury has joined the company as manager for rotogravure and slitting machinery sales.

The Goodyear Tire & Rubber Co., Akron, Ohio, has assigned Richard T. Clatterback to packaging films sales

Pre-assembled
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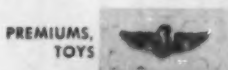
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WITH
INSTANT
PACKAGE SIZE
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from 3"x4" to 5 1/2"x12"

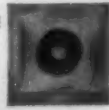


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ITEMS

HARDWARE



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TOYS



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WITH
CONVEYOR FEED

This manually fed conveyor is
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ucts, flat food items, toys,
bandages, or any other rea-
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OTHER MODELS AVAILABLE
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Wrap-Ade Unit Packagers
perform an entire cycle of
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Plants and people

and Anthony G. Dubrick to flooring sales.

Robert M. O'Hara has been appointed assistant to Henry H. Ogden, executive vice president and director of packaging sales of Atlanta Paper Co., Atlanta, Ga., a division of The Mead Corp. Edward R. Shelly has been named director for beer carton, Cluster-Pak, folding carton and Cluster-Pak machine sales. Varney Graves has been appointed as a market and sales analyst for the company.

O'Hara Shelly

Union Carbide Chemicals Co., Div. of Union Carbide Corp., is planning to build a technical service laboratory near Tarrytown, N. Y.

Visking Co., Terre Haute, Ind., another division of Union Carbide, has promoted Russell F. Pierce to the newly created position of operations manager of the plastics division.

Central Fibre Products Co., Quincy, Ill., has sold its interest in the Bruce Carton Co., Inc., Memphis, Tenn., to Jay C. Bruce, W. Parker Bruce and associates.

St. Regis Container Corp., a division of St. Regis Paper Co., New York, has appointed Robert S. Prentice as vice president in charge of sales for the Ajax Box Co. Div. of Chicago. William M. Avery has been named sales manager of the Albany Corrugated Box Div., succeeding Mr. Prentice. Ralph T. Crane is now New York district sales manager for the corrugated box divisions of St. Regis Container Corp.

Edward T. Hayes has been appointed representative in the New York area for the Flexible Packaging Div. of Nashua Corp., Nashua, N. H. He succeeds Charles Devine, who recently retired.

Merrill A. Grogel has been appointed to the newly created post of product supervisor for rigid foil containers by Reynolds Metals Co., Louisville, Ky.

United States Envelope Co., Springfield, Mass., has appointed Thomas A. Henry to the new position of assistant manager of advertising and sales promotion for the company.

Two company officers, William N. Brock, vice president and general sales manager, and Francis H. Ludington, Jr., vice president in charge of production and engineering, and Leland S. Brown, vice president of The First Na-



Put more Selling "Horsepower" in your POINT OF PURCHASE LABELS with **KLEEN-STIK®**

MOISTURELESS, SELF-STICKING ADHESIVE

If your present product or package labels lack the power to pull your sales load, hitch up to KLEEN-STIK! These long-lasting, self-sticking labels *dominate* at the point of sale. Help move *more* of your products by harnessing the selling power of KLEEN-STIK—"work-horse" of effective labeling!



DRAMATIC . . .

That's the need for KLEEN-STIK — the versatile material that sticks even on hard-to-label surfaces and shapes!



LARGE OR SMALL . . .

Buy or Purchase any, a KLEEN-STIK label puts your selling story out in front to stay!



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KLEEN-STIK's famous moistureless adhesive sticks tight on any hard, smooth surface — won't curl or peel under temperature or humidity!



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KLEEN-STIK labels go on fast and easy without water, glue, or heat — cut labor costs and speed production!



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Print KLEEN-STIK in any number of colors on a variety of label stocks — including Kraftmate, Fluorescent and foil for extra eye impact!

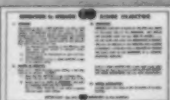
WE DO NO PRINTING—so contact your regular Label Printer. He can supply KLEEN-STIK Labels in roll-dispensed or individual split-back style.



PRODUCT AND
PACKAGE LABELS



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P.O.M.—an extrusion coating of polyethylene on "Mylar"—gives you a combination of advantages that add up to an extremely durable, transparent film suitable for a wide range of packaging needs.

P.O.M. is available in rolls or pouches, plain or printed.

P.O.M. combines the puncture resistance and sparkling clarity of "Mylar" with the seal-strength and MVT protection of polyethylene.

P.O.M. gives your package maximum strength and durability.

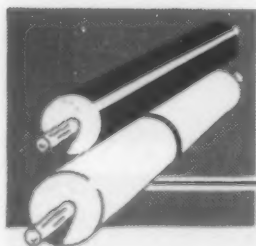
P.O.M. can be fed through most conventional automatic packaging machines.

P.O.M. is ideally suitable for vacuum packaging, and has high grease resistance and gas protection qualities.

P.O.M. gives your package extended shelf life.

P.O.M. is the film used for "boiling in the bag."

Write for your P.O.M. Fact Folder—enclosed in a P.O.M. bag, and containing price lists, yield charts and samples.



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HUBBARD 9-9780

Extrusion-Laminators • Printers • Converters

Plants and people

tional City Bank of New York, were recently elected to the board of directors of the Chase Bag Co., Chicago.



Carr

John R. Carr has been appointed marketing director of Anderson-McConnell Advertising Agency, Inc., Los Angeles. Mr. Carr, who has had considerable marketing experience in package goods, will be responsible for all aspects of package-goods marketing for the agency.

William J. Helfrecht has been appointed buyer of major and small appliances for The Grand Union Co., East Paterson, N. J.

Lily-Tulip Cup Corp., New York, has appointed Amos Hoagland assistant director of advertising, sales promotion and publicity. Mary Loretta Rosenlund has been named publicity manager and Marvin Haas, advertising manager. Walter Schreibeiss is now sales promotion manager and Lester Dittersdorf is sample control and conventions manager. Bessie Scott is food service manager, while Leon Beals handles field sales promotion.

The company plans a new 325,000 sq. ft. plant in Riverside, Calif., scheduled for completion late this year.

Jet-Pak, Inc., Div. of Greenwood Packaging Supply Co., Newark, N. J., has moved its Chicago warehouse and sales facilities to larger quarters at Intrastit Storage Co., 3100 S. Kedzie Ave., Section W, Chicago. Robert J. Cramer remains in charge of operations at this location.

Askania Regulator Co., Chicago, has appointed E. C. Deshauteau, Jr., and Walter C. Carolan Co. as company representatives in the New Orleans and Kansas City regions, respectively.

The Pittsburgh district office of The Bristol Co., Waterbury, Conn., recently moved to new quarters at 2250 Nobles-town Rd., Pittsburgh, Pa.

John M. Lowe has been named manager of the packaging division of John Morrell & Co., Ottumwa, Iowa.

Cellu-Craft Products Corp., New Hyde Park, N. Y., plans to increase its operating space by 25,000 sq. ft. and has commenced construction of a new building at its Hyde Park location. The company has also purchased adjoining land for further future expansion.

Coates Board & Carton Co., Inc., Garfield, N. J., has appointed William J. O'Donnell as district sales manager for

Chronic Labeling Ailments CURED INSTANTLY

with **Steigerwald**
Heat Seal Labels

NO GLUE - NO WATER - NO CLEAN-UP
NO BLISTERED LABELS - NO WRINKLED LABELS
NO MESS - NO LOOSE EDGES - NO SMEARS



Label Dri Challenger
applying
STEIGERWALD
Heat Seal Labels

On flat, round, or tapered containers including

BOTTLES - JARS - BOXES - AMPULES
JUGS - CANS - BOXES - HARDWARE
DRY GOODS - SPOOLS - DISHES, ETC.

STEIGERWALD HEAT SEAL LABELS without glue save labor and result in better labeling. Regardless of the size, shape or design of the product and the label—there's a STEIGERWALD HEAT SEAL LABEL without glue for every labeling operation.

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Harry W. Hogg
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University 2-2144

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A. B. Mason
905 Jefferson St.
Viator 2-6580

LOUISVILLE, KY.
Practical Products
Joe Hermann
219 W. Jefferson St.
Wabash 1257

MEMPHIS, TENN.
Edward Magnus
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Jackson 6-2574

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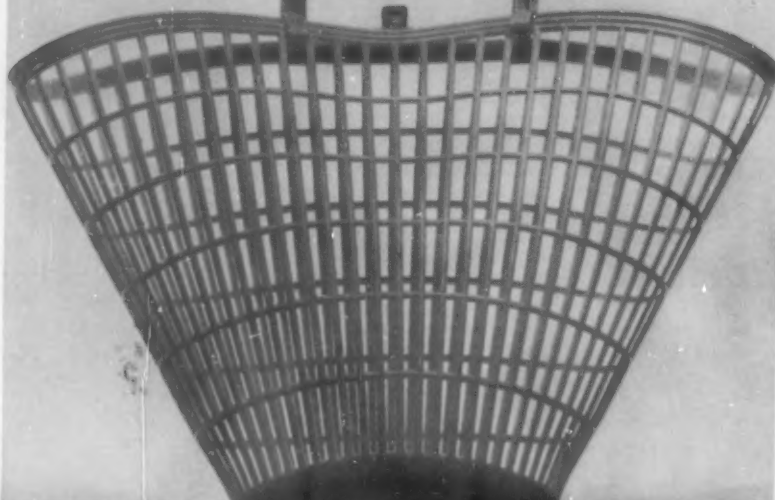
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provocative **RE-USE PACKAGES** put punch in your sales!

This imaginative container will suggest many merchandising approaches for your product. Send for Re-Use Packaging Catalog M-3 for other diverse packaging novelties such as cosmetic kits, jewel boxes, handbags, etc. Also available are a full line of plastic boxes in all sizes and shapes.

TOTE BAG

This all-purpose carry-all is a woman's delight. Useful as a shopping basket, for picnics, at the beach or for travel. They'll adorn it with a colorful handkerchief, attach bright ribbons or intertwine it with flowers.



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NEW HELIX

GRAVURE PRESS

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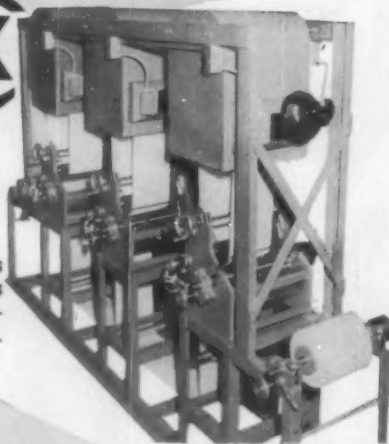
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Speeds up to 500 f.p.m.

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DESIGNERS AND BUILDERS OF FLEXOGRAPHIC AND ROTO GRAVURE PRESSES

Plants and people

southern New Jersey, Pennsylvania, Maryland, Washington, D. C., Virginia and West Virginia.

Benjamin Z. Ranan has been elected vice president of Artistic Mfg. Co., Inc., Stamford, Conn. He was previously with the Great Lakes Stamping & Mfg. Co.

P. Jay Harris has been appointed assistant sales manager at Atlantic Gummed Paper Corp., Brooklyn.



Dispennett Hill

Aluminum Co. of America, Pittsburgh, Pa., has appointed Robert W. Dispennett as manager of closure and collapsible tube sales. Raymond R. Hill

will take over Mr. Dispennett's former duties as manager of packaging foil sales in Pittsburgh.

Fort Wayne Corrugated Paper Co., Fort Wayne, Ind., is building additional facilities at its Chicago plant, designed to increase its size by 27%. The \$500,000 expansion program will add 47,700 sq. ft. to the present 175,000 sq. ft. of the plant's floor space.

William E. Campbell, III, has joined Package Products Co., Inc., Charlotte, N. C., as a sales representative in the flexible packaging division.

Niagara Box Factory, Inc., Fairlawn, N. J., has announced the completion of its new 65,000 sq. ft. building which houses the firm's executive offices and manufacturing facilities.

William J. Martin has been appointed sales manager of the western division of Oneida Paper Products, Clifton, N. J.

The Schwab Latex Co., Inc., and General Foam Corp., New York, have announced the completion of a modern plant in Hazleton, Pa., for the production of foam plastic for packaging.

The new mailing address of Schooler Mfg. Co. is P. O. Box 65, Pacoima, Calif.

George H. Andrews, 57, associate manager of export sales for E. I. du Pont de Nemours & Co.'s Film Department, Wilmington, Del., died on June 12 following an operation. Mr. Andrews had been associated with the DuPont firm for more than 43 years, having joined the firm at the age of 14, as a telegraph messenger.

For mix-it-yourself paints

ALCOA'S HEADLESS WONDER

This neckless tube was designed to fill a special requirement for the pigment industry. Needed was a tube capable of dispensing every last measured drop of its contents. This was vital if mix-it-yourself consumers were to arrive at exactly the color tones they sought. Result: this blind-end tube. The consumer snips off the entire end . . . and all the pigment dispenses readily. It would be usable for many other products, too.

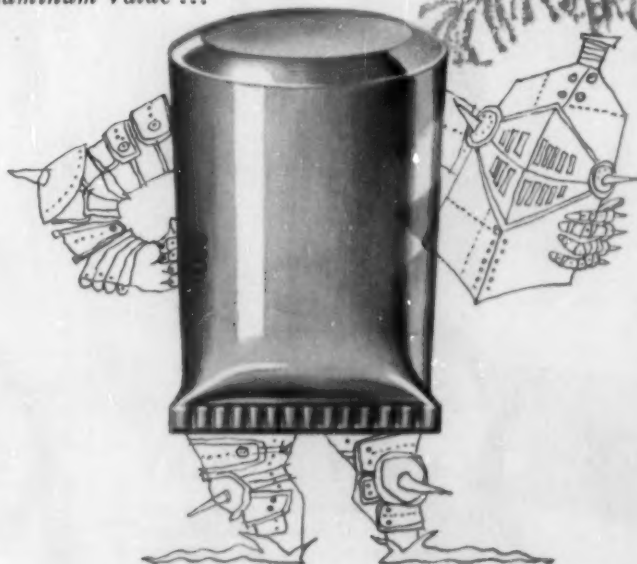
The "headless wonder" is a special Alcoa® Tube, designed to do a special job. Alcoa makes a number of types of standard conventional tubes. Most of them have necks and wear caps. One of them probably will package your product in great style. If not, Alcoa stands ready to design a tube that will.

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1711-G Alcoa Building, Pittsburgh 19, Pa.
We are interested in packaging _____
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Firm _____
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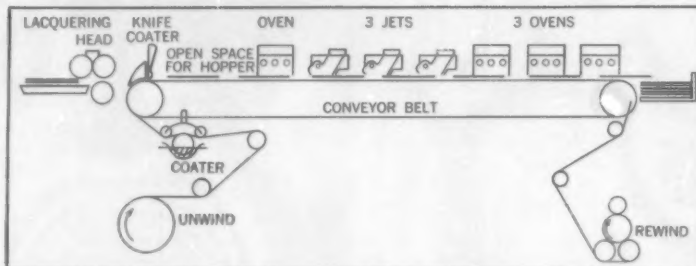
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Guide
to the Best in

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Secure the most **EFFECTIVE DRYING METHOD** for your **CONVERTING MACHINE**

Try the efficiency of the LIICA FAR INFRARED DRYING SYSTEM on your own products in our pilot machine. It is suited for drying coatings of emulsions, pastes, lacquers and inks on paper, film, foil, fabric, metal, board, wood, fiberglass and other materials in sheets and rolls.



Using 9 kw energy on a drying space of 5', 12½ lbs/ream—3000 sq. ft. (dry weight) have been dried at a speed of 100 ft/min evaporating 36½ lbs water/hour—4 lbs/kw.

You do not run any risk or incur any obligation in determining the best drying method for your products. For a small charge per day, you can do as many test runs on our machine as you like with the assistance of one of our engineers.

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Machine Specifications:

Maximum width 18"

Dryers:

Can be used in more than 20 ways, utilizing up to 15 kw (24 kw possible)

Maximum Temperature:

1000° F (1500° F possible)

Speed Range:

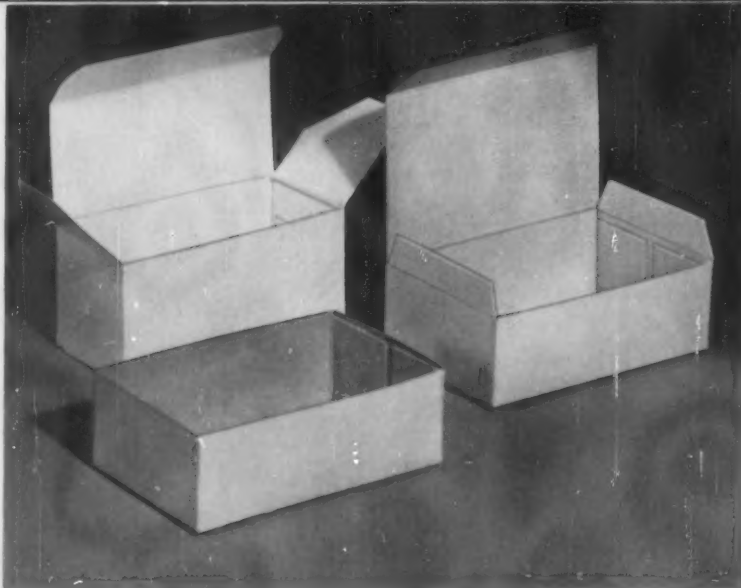
From 3 ft/min to 100 ft/min

Cartons and Trays with Consumer Convenience

**produced at
cost-cutting
high speeds on
Peters machines**

Easy to open! Hinged, top-opening Peters-style and glue type cartons are easy to open and close. Designed for use with or without overwrap.

Easy to store! Cartons and trays produced on Peters machines keep their rigid shape . . . store easily on housewives shelves without spilling.



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Write for new booklet
describing Peters machines
for better packaging
at higher speeds.

Imprint labels as you need them —

You can reduce your label inventory, cut printing costs, avoid overstocks and waste... by using a Tickometer to imprint labels, as they are needed.



- Imprinting labels — with weight, grade, size, color, type, code or date — is far faster and cheaper than “rubber stamping” or other marking. It’s also more economical and more efficient than conventional label imprinting. You do not run into problems of inventory and storage caused by the oversupply or shortage of preprinted labels bearing various information.

- The Tickometer imprints up to 1,000 pieces *a minute*, has a printing area $2\frac{1}{16}$ by $\frac{3}{4}$ inches, gives close register, and takes almost any kind or weight of paper, in sizes from 1 by 2 inches up to 15 by 15 (according to the Tickometer model). Feeds and stacks automatically, does not require a skilled operator. And can also be used to save clerical time in marking or imprinting checks, cards, coupons, tickets, sales and production slips, parts envelopes, tags, etc.

- It’s so accurate, banks use it to count currency! It can be set for a predetermined count, and for registering part totals as well as whole. And it even provides for optional consecutive numbering!

- Hundreds of manufacturers have found the Tickometer a big economy. Rented or sold. Nationwide service from 302 cities. Ask the nearest Pitney-Bowes office for a demonstration. Or send the coupon for a free booklet and case studies of savings.



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TICKOMETER

Counting & Imprinting Machine

Made by the originator of the postage meter

...offices in 102 cities in U.S. and Canada

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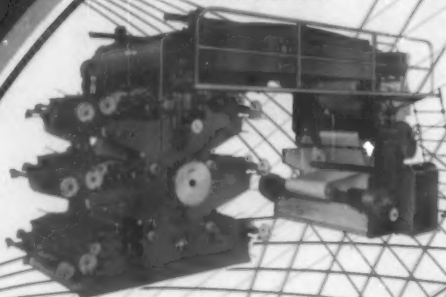


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COLOR...



*HHH JET JR. Multicolor Flexographic Press, Prints up to 6 colors . . . printing widths from 25½" to 42" with repeats, up to 31½".

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In today's highly competitive markets the customer must be made to *want* your brand. To catch the buyer's eye, *COLOR* is essential . . . pleasing effects that attract attention . . . sell on sight.

Whether you convert paper, board, film, foil, polyethylene, etc., we have the *right* flexographic presses and end printers to print and produce up to eight colors at their best! There is an HHH Flexographic Press to suit any purpose . . . size, speed, capacity or price. Send for literature.

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- ① SELECT the items you want
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There is valuable data—worth dollars and cents to you—in the literature and samples described below.

EQUIPMENT • SUPPLIES • SERVICES

RE-USABLE PLASTIC CONTAINER. Illustrated folder describes re-usable polyethylene jar with snap-seal cover available in pint, 1½ qt., quart sizes, transparent or in colors. Burlington Molding Corporation. (G-751)

FLOCK CATALOG. 22-page catalog describes uses of flock for decorating and coating. Contains samples of flock-coated paper in several colors. Claremont Waste Manufacturing Co. (G-752)

LINED PAPER BAGS. 8-page booklet describes use of Pliofilm-lined kraft paper bags for the packaging of pre-ground coffee. Lists results of survey of consumer reaction to these bags. Goodyear Tire and Rubber Company, Inc. (G-753)

PAPER TUBES. Illustrated folder describes company's paper tube containers in various sizes with metal, plastic, and paper closures for packaging dry, flowable products. Also shows "goose-neck" containers for products such as pencils, small tools. Niemand Brothers, Inc. (G-754)

GRAVURE CYLINDER ENGRAVING. Illustrated booklet describes the steps and facilities of company's gravure cylinder engraving service for printing plastic, foil, paper, fabrics. The Chambers-Storck Company. (G-755)

STAPLERS. Illustrated 12-page catalog covers company's extensive line of stapling and wire stitching machines, describing applications for each model. Line includes models for stapling bags and cartons. Bostitch. (G-756)

MOLD-RESISTANT PAPER. Description of mold-resistant paper suitable as a base paper for polyethylene coating operations, for military barrier materials, construction, insulation and other applications, is printed on a sample sheet of this paper. Mosinee Paper Mills Co. (G-757)

METAL DETECTOR. Illustrated folder describes applications for an electronic inspection device designed to reveal tramp metal in non-metallic products. Illustrates use on food and non-food packaging lines. Allis-Chalmers. (G-758)

HEAT-SEALABLE TAPE. Technical bulletin on heat-sealable tape of polyester resin includes description of characteristics of adhesive resins used in tape. G. T. Schjeldahl Co. (G-759)

THIN-WALL CONTAINERS. Folder contains comprehensive description of line of 4, 8, 12, 20, 60 oz. capacity injection molding presses suitable for making thin-wall thermoplastic containers. Lester Injection Molding Machines. (G-760)

MULTI-COLOR FLEXOGRAPHIC PRESS. Literature lists specifications for flexographic press designed for printing, tinting and coating film, foil and paper stock. Press provides work speeds up to 600 ft. per minute. Manhasset Machine Co. (G-761)

FIBRE CONTAINERS. Folder illustrates line of metal capped convolute and spiral fibre cans, with can tops such as pouring spout, pouring plug and semi-perforated types. Cleveland Container Co. (G-762)

TAPE DISPENSERS. Illustrated catalog sheet describes hand-operated dispensing machines for pressure-sensitive tape; gummed tape dispensers; bag sealers; envelope and label moisteners. Better Packages, Inc. (G-763)

COATING WEB MATERIAL. 8-page illustrated booklet describes unit that coats materials such as paper, foil, and film with lacquers, resins, emulsions. Contains installation diagram. Dils Division, The Black-Clawson Company. (G-764)

ROTARY LETTERPRESS. Illustrated folder describes rotary rubber plate letterpress that prints up to 6 colors. Available in models for any web sizes from 20 to 60 inches. Paper Converting Machine Co. (G-765)

INTERIOR PACKAGING MATERIAL. 12-page booklet discusses "Kimpak" cushioning material, including charts indicating performance characteristics. Also discusses use for surface protection. Kimberly Clark Corp. (G-766)

NON-DRIP CONTAINER. Booklet illustrates applications for cone top metal can equipped with non-drip nozzle for ease in pouring liquids, available in 12, 16, 22, 32 oz. sizes. American Can Company. (G-767)

LABEL FOR FILM. Folder describes label that can be transferred to transparent packaging material by heat and pressure and gives appearance of printed film. Also describes machine specifically designed to apply label. Dennison Manufacturing Co. (G-768)

FILLING MACHINES. Illustrated literature describes line of rotary volumetric machines for filling free-flowing powders, granulated materials into a variety of container types at speeds up to 300 containers per minute. Also describes automatic can seaming machines. John R. Nalbach Engineering Co. (G-769)

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"POLY ON MYLAR" SAMPLE. Literature describing characteristics of company's polyethylene-cellophane extrusion-laminate and "poly on Mylar" extrusion-laminate in several grades is enclosed in a sample bag of "P.O.M." film. Includes yield charts, price list. Print-A-Tube Co. (G-770)

BAG EQUIPMENT. Illustrated folder describes heat sealer-gluer for automatic, square and flat paper bags. Includes data on capacities of machine, specifications. George H. Fry Company. (G-771)

ELECTRONIC PACKAGE INSPECTOR. Illustrated folder describes electronic device that signals the presence of improperly filled containers on production lines at speed of 600 a minute. Photobell Sales Corporation. (G-772)

UNIT PACKAGES. Illustrated folder describes equipment that forms, fills, and heat-seals unit-packages for solids, liquids, powders, or semi-solids. The Bell Machine Co. (G-773)

ROTARY VACUUM FILLER. 14-page brochure describes unit for filling a wide variety of products into various container types. Models available for filling 8 to 128 oz. capacity containers. U. S. Bottlers Machinery Co. (G-774)

FLOCK BROCHURE. 18-page brochure describes company's flock, suitable for applications such as box decorating. Includes sample flock-coated swatches, including fluorescent "Dayglo" flock. The Rayon Processing Company of R. I. (G-775)

COATING CONTROL SYSTEM. Folder describes beta ray gauge coating control system for maintaining uniformity of polyethylene coatings on paper. Contains diagrams and illustrations of operation. Guardian Paper Co. (G-776)

METAL CLOSURE FOR CONTAINERS. Folder describes and illustrates working principle of a "snap-on" closure for glass or metal containers. Includes illustrations of company's nozzles, spouts, seals and over-seals. Upressit Products Corp. (G-777)

FILLING AND SEALING CARTONS. Folder describes machine that automatically fills and seals cartons of 3 to 14 in. ht. with granular products at speeds up to 60 cartons a minute. Clybourn Machine Corp. (G-778)

CARTON FORMING MACHINE. Data sheet describes machine that forms and glues cartons from flat blanks at speeds up to 4,500 per day, depending upon size of carton. United Shoe Machinery Corp. (G-779)

SHIPPING SACKS. 16-page booklet discusses laminated textile shipping sacks composed of paper, burlap, plastics for retaining initial moisture of package or for preventing seepage during shipment. Chase Bag Co. (G-780)

TABLETING AND PHARMACEUTICAL EQUIPMENT. 24-page illustrated booklet gives specifications and descriptions of extensive line of pharmaceutical and tableting equipment, including tablet presses, mixers, and ovens. Arthur Colton Co. (G-781)

PLASTIC CONTAINERS. Illustrated folder describes line of stock rigid polystyrene vials and flexible cellulose acetate vials, available threaded, in a variety of sizes. Celluplastic Corp. (G-782)

METAL SEALS AND CLOSURES. 16-page booklet describes threaded metal closures for a wide variety of glass container types. Contains illustrations and descriptions of automatic and semi-automatic machines that apply these closures. Metal Closures, Ltd. (G-783)

INKS FOR LETTERPRESS. Sample booklet contains halftones letterpress printed with company's wide variety of inks, including metallic and snap-set inks. Howard Flint Co. (G-784)

TRANSPARENT ACETATE CONTAINERS. Illustrated folder describes line of transparent acetate vials and tubes having round, square, rectangular, oval, triangle or half-round cross-sections. Also describes transparent acetate sleeves for drawer-type, set-up boxes. Extruded Plastics, Inc. (G-785)

BUTTER PACKAGING. Folder describes line of machines for forming, wrapping and cartonizing butter and margarine. Includes specifications in blueprint form. Lynch Corp. (G-786)

PRESSURE-SENSITIVE TAPE SAMPLES. Catalog contains specifications, and suggested applications for cloth, paper pressure sensitive tapes. Includes sample tape swatches. Armo Adhesive Tapes, Inc. (G-787)

BOX COVERING SAMPLE. Folder contains swatches of company's "Buckraft" fabric-texture box covering available in several colors in regular or washable finishes. Springfield Coated Paper Corp. (G-788)

HEAT-SEALABLE FILM. Illustrated folder describes applications of heat-sealable polyester films in packaging products ranging from food to metal parts. Includes properties chart, film sample. Minnesota Mining & Manufacturing Co. (G-789)

COATING BOX BLANKS. 16-page brochure describes unit that wax-coats box blanks such as those used for butter, ice cream, frozen foods. Contains illustrations and diagrams of principal working parts. The International Paper Box Machine Co. (G-790)

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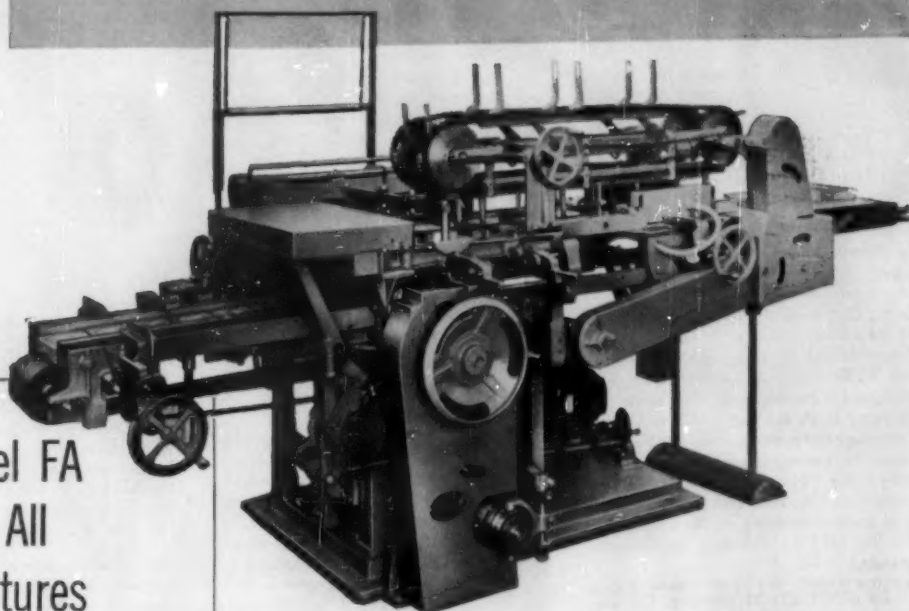
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Feed: Continuous chain infeed, or intermittent chain infeed to handle stacks of flat items.

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Here's the machine that will help cut your costs with top production every day. In the Model FA, you get speeds up to 100 packages a minute, combined with the most versatile operation you can find. You're assured of better wraps, too, for packages pass through the FA in a straight line, and operations are performed without turning. Improved electric eye registration gives you the *most accurate* panel registration possible, and an automatic paper stop controls feeding.

Size ranges on the Model FA run from 2" to 11½" L, 1⅛" to 5⅞" W, ⅛" to 3½" H. Models FA-2, -3 and -4 handle larger packages. You can get full information on the many FA features by contacting our nearest office.



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For your information

The Glass Container Mfrs. Institute recently elected Edmund F. Ball, president and chairman of the board of Ball Bros. Co., as institute president. Other newly elected officers include: first vice president—J. S. Heuisler of Maryland Glass Corp., and second vice president—F. N. Dundas of Dominion Glass Co. Ltd. The following members of the institute have been named to the board of trustees: Mr. Ball, Mr. Heuisler, Mr. Dundas and Howard C. Heger of the Pierce Glass Co.



Ball

At the recent 12th anniversary dinner of the Fibre Drum Mfrs. Assn., a bronze plaque was presented to Herbert L. Carpenter of Greif Bros. Cooperage Corp., first president of the association. At its annual meeting, H. H. Filler of Rheem Mfg. Co. was re-elected president and W. D. Cox of Fibre Drum Co. was re-elected vice president. New secretary-treasurer is F. K. Duffy of Greif Bros. Cooperage Corp. and Glenn Mather continues as managing director. New directors are Peter P. Wojtul of Continental Can Co., Inc., and Chris Binaria. Next general meeting of the association will be held in October, in Toronto, Canada.

At its recent annual meeting, the National Fibre Can & Tube Assn. adopted measures to improve industry mechanization, to proceed with a public relations-marketing campaign, to clean out various unfair and illegal practices within the industry generally, and to prosecute cost education among its membership. President James C. Baxter reported that during the past year the industry showed an 8% growth and he predicts even greater progress for the industry. Newly elected officers are: president—James B. Platt, Jr., Stone Paper Tube Co.; vice president—Martin H. Stark, Arrow Paper Products Co.; treasurer—George R. Brown, Mead Board Sales, Inc.; managing director—Paul S. Hanway, and assistant treasurer—Miss H. F. O'Brien.

C. Russell Mahaney of St. Regis Paper Co. has been elected president and a director of The Society of the Plastics Industry, Inc. He succeeds Norman Anderson of General Molded Products, Inc., who is now chairman of the SPI board of directors. R. B. Gutsch of aaRbee Plastic Co. has been elected vice president and a director, and William C. Bird of Pro-phy-lac-tic Brush Co.'s Prolon Div. was re-elected secretary-treasurer and a director.

Closing date for entries in the 21st Annual Variety Packaging Competi-

tion, sponsored by *Variety Store Merchandiser*, has been set for Aug. 31. "Best Packages of 1957" will be selected in eight different divisions. Prominent variety buyers and merchandisers, as well as package designers make up the Committee of Judges. Any package that is sold in a variety chain is eligible and may be submitted by manufacturers or their representatives, distributors, advertising agencies, package designers and packaging suppliers. Entries should be sent to Packaging Contest Director, *Variety Store Merchandiser*, 192 Lexington Ave., New York 16.

The 53rd semi-annual New York Gift Show is scheduled for Aug. 25-30 at the Hotel New Yorker and the N. Y. Trade Show Bldg. in New York. Attendance is expected to reach a new high this year, with exhibits from more than 30 foreign countries as well as those of the United States. Complete show information is available from George F. Little Management, 220 Fifth Ave., New York 1.



Graves

E. King Graves has been appointed manager of the Packaging Division of the American Management Assn. In this capacity, Mr. Graves will direct the division's program of educational meetings for packaging executives, including the AMA's annual National Packaging Exposition and Conference and the continuing series of small-group clinics on specific packaging problems. Mr. Graves comes to the AMA from Barry-Wehmiller Machinery Co.

After an absence of six years, the Exposition of Chemical Industries is returning to New York Dec. 2-6, at the Coliseum, with some 500 exhibitors displaying on all four floors of the building. The most comprehensive array of chemical products and chemical-process equipment is planned, with special sections for displays of chemicals and raw materials, as well as laboratory equipment and supplies. The majority of the exhibits will feature the theme "Increase Production—Cut Costs." Exposition manager is E. K. Stevens, president of the International Exposition Co. Additional details are available from the Publicity Dept., 26th Exposition of Chemical Industries, 480 Lexington Ave., New York 17.

The Institute of Packaging in London, England, announces that membership has increased by no less than one-third in 1956. This increase is attributed largely to the introduction of the "Qualified Membership" rules under which admission to membership has

been largely through entrance examination only. Announcement has been made of the election of the Rt. Hon. Lord Duke of Pavenham, T.D., D.L., as institute president; John Castle of Eburite Corrugated Paper Co., Ltd., as chairman and V. Gordon-Saker of Reads, Ltd., as vice chairman. E. G. O. Ridgwell of General Electric Co., Ltd., was nominated as vice president elect.

The Temple University-SIPMHE 1957 Short Course is scheduled for Oct. 28-30 in Atlantic City during the National Industrial Packaging & Handling Exposition of 1957. Topics ranging from basic principles of packaging engineering through management coordination, communications and equipment financing are to be included. The Short Course theme is "Brainstorming for Profits—practical approaches to better packaging, handling, transportation and distribution," with course subjects covering four major fields: packaging, handling and transportation, warehousing and space utilization, and management. A certificate will be awarded to all persons who register and complete a full course. For additional information, contact the Society of Industrial Packaging & Materials Handling Engineers, Suite 611, 111 W. Jackson Blvd., Chicago 4.

The Seventh Annual Conference and Exposition of the Produce Packaging Assn., scheduled for Sept. 15-18, Shoreham Hotel, Washington, D. C., will place equal emphasis on round-table workshop sessions and the produce packaging show of materials, equipment, supplies and services. Information on the conference and exposition may be obtained from Robert A. Cooper, executive secretary and show manager, Produce Packaging Assn., 500 Fifth Ave., New York 36.

The increasing importance of the package as a salesman since the growth of self-service merchandising is pointed up in a booklet titled "The Man in the Package," published by the Paraffined

What's doing

- July 10-20—British Plastics Exposition and Convention, Olympia, London, England.
- Aug. 3-7—International Food Show, Municipal Auditorium, Atlanta, Ga.
- Aug. 25-28—Third Annual Fancy Food & Confection Show, Sheraton Astor Hotel, New York.
- Aug. 25-30—New York Gift Show, Hotel New Yorker, New York.
- Aug. 29-31—American Pulp & Paper Mill Superintendents Assn., New York-Canadian Div., fall meeting, Saranac Inn, Upper Saranac Lake, N. Y.



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One-man carton bottom flap-gluer of unfilled cases and top flap gluer of filled cases. And/or tape sealer as required.

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• General's case sealers have all the design features that engineered the unequaled "General Line" for taping or gluing the "manufacturers-joint" in container manufacturing plants throughout the industry. It's really wise to General-ize. There's nothing like them.

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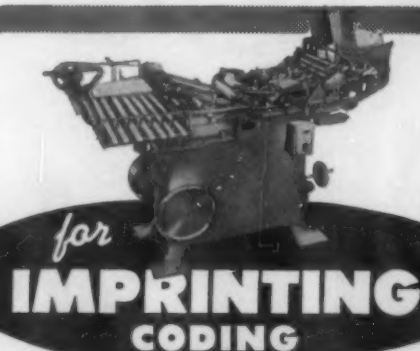
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For your information

Carton Research Council. The booklet reports a study of consumer-package behavior and gives the conclusions drawn by Psychologist Ernest Dichter of the Institute for Motivational Research, Inc. The study shows that packaging can no longer be considered a function of a company's production department, but has become a province of sales and promotion. The "sell" of a package takes on a good many qualities formerly inherent in good salesman-consumer relations and the booklet presents some of the "personality traits" that packages must embody as they replace the salesman. Copies are available from the Paraffined Carton Research Council, 111 W. Washington St., Chicago.

The recent 7th National Materials Handling Exposition held in Philadelphia is reported to have been the most successful in the 10-year history of the show, with some 28,600 registrants from 14 countries. An all-time-high attendance record of 900 registrants was set for the three-day conference. The 1958 show will be held at the Public Auditorium in Cleveland, June 9-12. A sizeable outdoor section will be added to this show because of increased interest in outdoor handling and storage, according to Clapp & Poliak, exposition managers.

A new film titled "Department Stores Speak Up for Packaging," which summarizes the high points of a study made jointly by the Folding Paper Box Assn. and the National Retail Dry Goods Assn., is reported to have been very enthusiastically received at national sales meetings of many firms. The film is now available in limited quantities for showing to business firms on request to C. Colburn Hardy, Carl Byoir & Associates, Inc., 10 E. 40 St., New York 16. FPBA will provide a speaker on packaging for organizations having group meetings.

W. Braun Co. has published a new 103-page manual which contains a very complete listing of containers and closures used in the packaging industry. All containers, both glass and plastic, are listed according to size, with a drawing of the bottle and specifications. There are also photographs of many of the glass and plastic containers and closures, together with an explanation of ceramic decorating and a glossary of trade terms and simple conversion factors. Copies are available from W. Braun Co., 300 N. Canal St., Chicago 6.

The Dow Chemical Co. has issued a 24-page illustrated booklet on Styron (Dow polystyrene) packages, entitled "Supplement to a Catalog of Packages." It shows new Styron containers available since the 1955 publication of "A



planning to package a new product?

If you are . . . or are looking for ways to brighten your present packaging picture . . . we can help you figure out all the angles and come up with the answer that will give your packaging more "seli".

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A secondary seal to insure product freshness and appearance. Oyster white, opaque, matte finish, vinyl—impervious to alcohol, moisture, oil or hot-packed products. Keep jar lids clean and dry.

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And staples brought costs down so much that the company gets orders now where it

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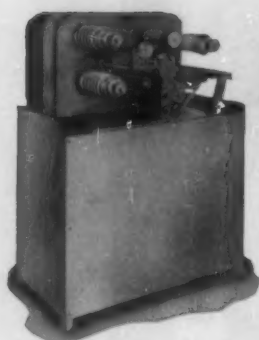
Catalog of Packages." With each illustration are the size, color, type of cover, suggested uses and the name and address of the manufacturer. Copies are available from the Merchandising Section, Plastics Sales Dept., The Dow Chemical Co., Midland, Mich.

A report being distributed to members of the Steel Shipping Container Institute by Livingston Kiplinger, president, reveals that although faced with spiraling material and labor costs, plus a severe drop in shipments to the petroleum industry, its major outlet, manufacturers of steel shipping drums and pails are nevertheless at peak production. He reports that the slack in drum shipments to the petroleum industry in postwar years has been taken up by the fast-growing chemical industry. The use of linings on interior drum surfaces is an important factor in the increasing use of steel drums for chemical-products shipment. The steel container manufacturers have been concentrating on the development of new lining formulations and the industry sponsors a research and development program at the Battelle Memorial Institute. In addition, production growth of the chemical and petrochemical industries, the growth of the atomic energy industry and other new industries are providing new and increasing requirements for drums and pails.

Some 100 flexible packaging converters and suppliers attended the recent two-day meeting of the National Flexible Packaging Assn. in St. Louis. Growth of flexible packaging was predicted by several speakers, including R. C. Krueger of Du Pont, who said that cellophane capacity of about 565 million pounds was expected by early 1959. John M. Cowan, NFPA managing director, predicted film production would reach the billion pound mark in 1961.

Closing date for entries in the National Flexible Packaging Competition, open to NFPA members and co-sponsored by the association and *Paper, Film & Foil Converter* magazine, is Aug. 1.

A proposal that new film types and formulations be given commercial testing in converter plants before release to the trade was discussed. The newer high-density polyethylene and military packaging specifications were also considered. Two new committees were set up to work out standards, test methods and nomenclature on laminated and coated products. C. W. Hoffman of Riegel Paper Co. was named general chairman. Next general meeting of the group was set for the Greenbrier, White Sulphur Springs, W. Va., September 26-28. The annual meeting will be held Jan. 14-16, 1958, Hotel Biltmore, New York.



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MODEL 618
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Tops in efficiency
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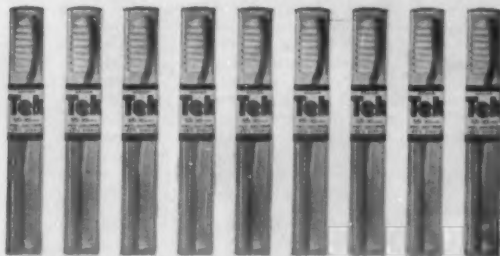
The Model 618 is a remarkably compact slitter and rewinder, embodying the most advanced design. Small in size, this machine requires no fixed installation. It will perform many jobs now being done by much larger machines. A professional job can be obtained easily and efficiently, even by inexperienced operators.

As special widths can be quickly slit, inventory on various widths is held to a minimum and shelf spoilage is eliminated. Set-up time for short runs or special orders is very short. Sudden rush orders can be filled without delay. John Dusenbery Co., Inc., 275 Grove Ave., Verona, N. J. Tel: Center 9-3900.

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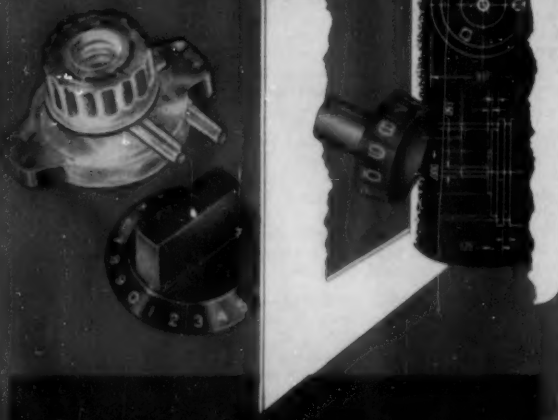
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Excellence

U. S. patents digest

This digest includes each month the more important patents of interest to those who are concerned with packaging materials. Copies of patents are available from the U. S. Patent Office, Washington, at 25 cents each in currency, money order or certified check; postage stamps not accepted. Edited by H. A. Levey.

Convertible Display Carton, Walter M. Curtis, Hamden, Conn. (to the New Haven Board & Carton Co., New Haven, Conn.). U.S. 2,787,371, April 2. A carton which comprises connected bottom and side walls, pairs of end flaps, end-wall panels and a cover closing the top of the carton and having a connecting section hinged to the top edge of the rear end-wall panel, and a main section hinged to the front edge of the connecting section.

Closure, Karl E. Baumann, Mount Prospect, Ill. (to Baxter Laboratories, Inc., Morton Grove, Ill., a corporation of Delaware). U.S. 2,787,394, April 2. A unitary cap structure having a cylindrical side wall and a top wall, and a central disk having expanded peripheral portions underlying said top wall.

Self-Sealing Pressurized Reinforced Plastics Container, Walter A. Radford, Arlington County, Va. U.S. 2,787,397, April 2. A self-sealing pressurized container comprising in combination a resilient body, a plurality of lands, a resilient cap and a valve in top of cap.

Side-Seam Lock for Containers, Carl L. Nylander, Oakland, Calif. U.S. 2,787,401, April 2. A side-seam lock comprising a body blank rolled into cylindrical form having two interlocking hooks, including a folded flange, a plurality of registering semi-circular recesses, a folded flap, a plurality of buttons extending into each of said recesses and a plurality of crowns overlying the corresponding one of said buttons in substantially face-to-face relation.

Quick-Set-Up Folding Container, Noble Andre, San Francisco, Calif. U.S. 2,787,408, April 2. A flat container adapted to be expanded to open position and to remain open when so expanded, said container being formed from a flat, generally fan-shaped blank of cardboard.

Mutil-Unit Container, Clarence W. Vogt, Norwalk, Conn. U.S. 2,787,409, April 2. A blank adapted to be formed into a commodity package and comprising a plurality of parts, each part including a plurality of peripheral portions in end-to-end relation, each having side flanges hinged upon opposite sides.

Potato Chip Packaging Machine, Walter J. Reynolds, Portland, Ore. (to Walter J. Reynolds Co., Portland, Ore.). U.S. 2,787,436, April 2. In a weighing machine, means for feeding material to be weighed, a scale bucket providing two weighing compartments for alternately receiving said material from said feeding means, movable means including a pivoted member carried by said bucket and movable over center between two alternate positions.

Machine and Method for Applying a Tear String or Tape to Box Carton

Blanks, Roy R. Allison, Brewster, Kans. (to Minnesota Mining & Mfg. Co., St. Paul, Minn., a corporation of Delaware). U.S. 2,788,079, April 9. A machine for applying a tear tape or the like to a box carton blank comprising in combination a source of tape supply, means of supporting and moving a carton blank, means for continuously coating adhesive on one face of the moving tape, for applying tape to blank and means of severing tape from tape supply.

Medicinal Package, Arthur L. Hinson, Mauricetown, N.J., et al. (to Owens-Illinois Glass Co., a corporation of Ohio). U.S. 2,788,002, April 9. A medicinal package comprising a primary tubular container, a fluid-tight closure for one end of said primary container, a piston-type closure slidably mounted in the other end of said primary container, and secondary container freely movable within liquid reservoir, and having a wall portion formed of readily frangible material.

Self-Sealing Collapsible Tubes, Abraham Hertz, Brooklyn, N.Y. U.S. 2,788,160, April 9. A self-sealing collapsible tube comprising flexible walls, a neck integral with said walls, a cap having a dispensing aperture and resilient means for urging cap toward flexible walls.

Dripless Pouring Device, Robert John Kemper, Los Altos, Calif. (to Preferred Product Features, Inc., a corporation of California). U.S. 2,788,161, April 9. A dripless pouring bottle with a pouring surface formed at the upper end of the neck, comprising a large and a small concavity about pouring lip of neck.

Collapsible Carton, Belmont D. Osteen, Birmingham, Alabama, (to Birmingham Paper Co.). U.S. 2,788,168, April 9. A collapsible carton formed of an integral blank and comprising a hingedly connected panel, end walls and end flaps.

Method and Apparatus for Forming Moistureproof Gussets, Randolph M. Browning, Pensacola, Fla. (to St. Regis Paper Co., New York, N.Y.). U.S. 2,788,720, April 16. In the manufacture of bag tubes, continuously advancing a web supply while continuously forming same into a flattened tube with gussets along each side, forcing open said gussets and introducing at bag-length intervals into each opened gussets preselected quantities of moisture-resistant adhesive material.

Folding-Box Blanks with Provision for Accurate Stacking, Thomas Toronto, Grand View, N.Y. (to Robert Cair Co., Inc., New York, a corporation of Delaware). U.S. 2,788,931, April 16. A series of paperboard sheets, each having at least one box blank defined therein by cutting and creasing, and means by which said series of sheets may be

stacked with the blanks therein in accurate registry.

Container with Locking Cover, Michael German, Jr., St. Louis, Mo. (to Crown-Zellerbach Corp., San Francisco, Calif., a corporation of Nevada). U.S. 2,788,932, April 16. A container having a body and a locking cover member, the body having a bottom with foldably connected, upstanding side-wall structures and end walls.

Carrier-Carton Assembling Machine, Frank D. Palmer, Winter Park, Fla. (to Package Machinery Co., East Long-Meadow, Mass.). U.S. 2,789,481, April 23. A machine for assembling bottle carriers and the like which comprises a mandrel formed with a slot opening to one end and to opposite sides of the mandrel, means to inset a partition member, means to fold a pre-formed blank and means to secure contacting portions together.

Machine for Making Box Blanks, Alexander V. Hose, Marblehead, Mass. (to Colt's Patent Fire Arms Mfg. Co., Inc., Hartford, Conn., a corporation of Delaware). U.S. 2,789,483, April 23. In a machine for making a foldable box blank having a predetermined length, the combination of a support having a longitudinal pathway for a sheet of stock, normally rotating opposed feed rolls, transversely extending slotting and scoring means, a plurality of means for successively arresting and restarting the rotation of the feed rolls and means automatically operable of sheet feeding.

Method of Treating Paperboard, Sol Chafan, Bronx, N.Y. U.S. 2,789,921, April 23. The method of increasing the strength, rigidity and water resistance of paper products, comprising applying a rosin solution to said product to saturate the fibres thereof.

Bowl and Cover, Earl S. Tupper, Upton, Mass. U.S. 2,789,607, April 23. A container and hermetically sealable and removable cover engageable therewith, each formed of a locally deformable and resilient thermoplastic material, including polyethylene.

Wedge Type of Container and Cover, Earl S. Tupper, Upton, Mass. U.S. 2,789,608, April 23. A container and hermetically sealable and removable cover therefor including at least a pair of adjacent and curved peripheral rim portions tangentially continuous and of dissimilar curvature.

One-Piece Tear Cap or Closure, Karl E. Baumann, Mount Prospect, Ill. (to Baxter Laboratories, Inc., Morton Grove, Ill., a corporation of Delaware). U.S. 2,789,718, April 23. A unitary cap structure having a cylindrical side portion and top wall, said top wall being severed



Merit Award Winner, National Flexible Packaging Contest

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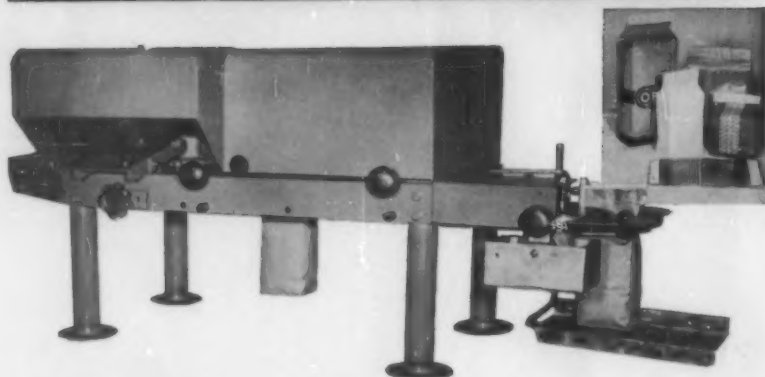
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along lines of severance to provide on one side a raised tab and on the other side and unsevered portion diametrically aligned with said tab.

Container Closure Fitment, Jack M. Wheaton, Toledo, Ohio (to Owens-Illinois Glass Co., a corporation of Ohio). U.S. 2,789,719, April 23. The combination of a container, closure cap and fitment comprising a unit subject to internal pressure, said fitment comprising a ring of flexible material interposed between the said container lip and the said cap having upper and lower annular sealing surfaces to produce a seal.

Liquid Container With Drip-Prevention Means, Fred G. Pellett, Maumee, Ohio (to Owens-Illinois Glass Co., a corporation of Ohio). U.S. 2,789,740, April 23. A container for liquids comprising a body having a circular neck, there being an unthreaded circular wall extending upwardly from and co-axial with the neck proper and terminating in a relatively flat annular rim, said unthreaded circular wall being of lesser external diameter than, but of the same internal diameter as the neck proper, and a pouring element.

Container Holder, Fay F. Brooks, Unadilla, N.Y. U.S. 2,789,744, April 23. In a detachable holder for compressible containers, a pair of unitary pivotable wire members adapted to engage the sides of the container, a straight wire handle portion, a plate member rigidly attached to each of said base portions and formed as a shallow receptacle for the base portion of said container.

Sealed Paperboard Carton, Kaiji Negoro, Rockford, Ill. (to Dairy Containers, Inc., Rockford, Ill.). U.S. 2,789,745, April 23. In a paperboard carton, an open-end body and an end closure closing one end thereof, said body comprising a generally rectangular blank.

Carton, Howard N. Hovland, Appleton, Wis. (to Marathon Corp., Rothschild, Wis.). U.S. 2,789,746, April 23. A tamperproof reclosable carton formed of a single blank suitably cut and scored to provide a receptacle portion having an opening at the top thereof and a hinged box-like lid telescoped over the open top of the receptacle.

Display Lug Box, Roswell P. Barbour, Lodi, Calif. U.S. 2,789,748, April 23. A lug box including end members, sides secured thereto and a lid extending between the end members with an upward bow.

Hinged Lid Box, Joseph Kramer (to the Gardner Board & Carton Co., Middletown, Ohio). U.S. 2,789,750, April 23. In a hinged-lid box including a main panel, front and side panels, a rear wall and a cover connected to said rear wall, said lid carrying tongue portions which engage said front and side panels to secure said lid.

Cartons, Samuel H. Feldman, Philadelphia, Pa. U.S. 2,789,751, April 23. In

a carton of the type having a sealed top closure comprising a flap secured to each of the front, rear and two side walls of the carton at the upper edges of said walls and adhesively bonded in overlapped relation, means to facilitate separation of the top closure as a complete unit.

Dispensing Container for Rolls of Sheet Wrapping Material, Walter A. Klein, et al. (to the Dow Chemical Co., Midland, Mich.). U.S. 2,790,545, April 30. A dispensing container for packaging a wound supply roll of sheet wrapping material, trough-forming elements in said container providing therein an open V-shaped, outwardly funnelled trough having an outlet for said sheet wrapping material disposed longitudinally along its bottom, said trough extending in the direction of the roll width-accommodating length of said container, said elements consisting of a pair of L-shaped sections hinged to the container along their upper edges and elsewhere unattached, and being adapted to press flatly against a roll of said sheet wrapping materials in order to frictionally snub and brake it when it is contained in and being dispensed from the container.

Pressure-Sealing and Excessive Pressure-Relieving Closure Cap for Containers, Fridolin A. Hodges, et al., Chicago, Ill. U.S. 2,790,570, April 30. A positive pressure-sealing and excessive positive pressure-relieving closure cap for the mouth of a container having a positive above-atmospheric pressure therein, comprising a metallic cap having a depending flange provided with means for securing the cap about the mouth of the container and an annular compressible gasket in the cap and secured by the cap in gas-seal position upon the mouth of the container.

Closure Arrangement for Thin-Walled Rigid Plastic Vial, Richard L. Lawrence (to Celluplastic Corp. of New Jersey). U.S. 2,790,576, April 30. An improved plastic container comprising the combination of an open-mouth vial having the top portion of its side wall adjoining the open mouth cut away on the outside to reduce the thickness of the top of the side wall of the vial and provide a lead-in portion around the open mouth of the vial, said lead-in portion having a plurality of parallel ribs positioned around the exterior thereof that extend upwardly from the bottom of such lead-in portion and a cap which mates with and frictionally engages the lead-in portion of the vial that is free of the ribs, to form a closure for the vial when the cap is pushed home over the mouth of the vial.

Container Top and Opener Construction, Louis Fried, Philadelphia, Pa. U.S. 2,790,577, April 30. A container top construction comprising a plate member adapted to provide a closure for a container, said plate member having an opening therein through which the contents of the container can be dispensed, a frangible sealing member closing said opening and an opener means carried by said plate substantially covering said opening in the plate member from both sides of said plate and protecting the frangible sealing member until it is desired to open said container.

Rotatable Valve for Containers, Edward R. Kolenda, Oaklawn, Ill. U.S. 2,790,583, April 30. A valve for a container holding liquid, powder, or plastic

Hansella PACKS

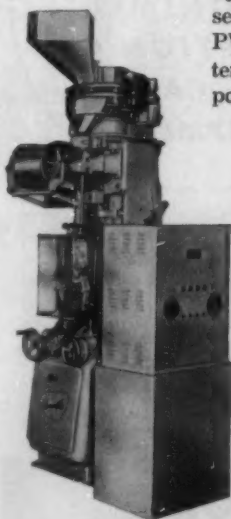
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materials to be discharged from said container, said valve comprising a housing adapted at its lower end for communication with the interior of said container, a cylindrical bearing surface located interiorly at the upper end of said housing, a cylinder rotatable in said bearing surface, a cylindrical stud carried by said cylinder and means to hold said cylinder in a closed position, said means comprising a circular recess at one side of said housing having a neck portion of a width slightly less than the diameter of said cylindrical stud.

Box, Ira Contant (to Hoffman-La Roche, Nutley, N.J.). U.S. 2,790,587, April 30. A merchandise dispensing container comprising, in combination, a tray having four sides, a base and a four-sided cover sleeve for said tray.

Shipping Containers, Thomas J. Deeren (to Owens-Illinois Glass Co., a corporation of Ohio). U.S. 2,790,588, April 30. A shipping container comprising nested inner and outer non-circular tubular cartons having a common longitudinal axis.

Telescopic Container, George A. Moore, New York, N.Y. U.S. 2,790,589, April 30. A telescopic display container for articles of merchandise comprising a five-sided tray folded of sheet material to contain said articles, said tray having two of its opposed longitudinal side walls folded upwardly along parallel corner edges of the integral bottom wall of the tray.

Can Carriers, Patrick A. Toensmeier (to the New Haven Board & Carton Co., New Haven, Conn.). U.S. 2,790,590, April 30. A carton for holding a row of cans having chimes at least one end, which comprises a sleeve open at its ends and formed of a pair of like side walls and top and bottom walls connecting the top and bottom edges.

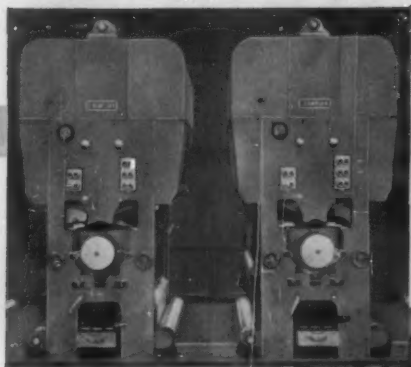
Commodity Bag for Automatic Filling Machines, Shy Rosen (to Milprint, Inc., Milwaukee, Wis.). U.S. 2,790,591, April 30. A container for use in automatic filling machines comprising a bag-like body formed of flexible material.

Laminated Material and Bags and Linings Made Therefrom, James F. Doyle, et al. (to Arkell Safety Bag Co., New York, N.Y.). U.S. 2,790,592, April 30. In a bag of the class described, a bag tube made up of a plurality of plies of crinkled sheet material adhesively secured together at the crests of the crinkles thereof.

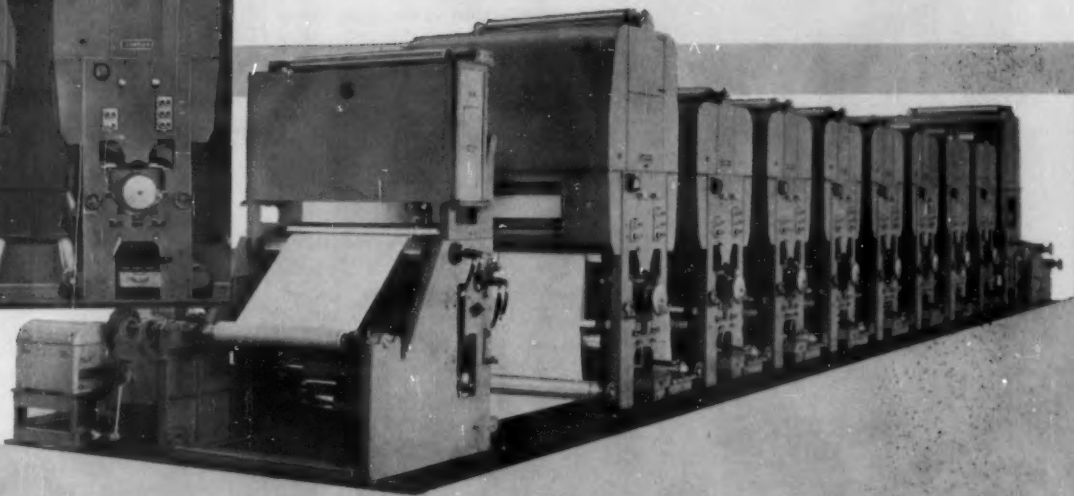
Art of Packaging, Paul B. Hultkrans, et al. (to Milprint, Inc., Milwaukee, Wis.). U.S. 2,790,594, April 30. A commodity container comprising, a base sheet of flexible wrapping material having a thermoplastic coating adhered to one surface thereof and folded with the coating disposed between folds to provide similar opposed side walls sealed at opposite ends inwardly of and adjacent the marginal edges to form a pouch-like container.

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New proof for bras

[Continued from page 127]

The first unit offered by the company was acceptable to most specialty shops and low-priced departments, but not to the better-grade stores. Later units have, therefore, been upstyled to harmonize with most interior decoration used by the best stores, as well as to save counter and floor space. One new counter unit, for example, is designed like a ferris wheel and holds 15 dozen packages.

New perspectives in department-store merchandising have also been opened up by Exquisite Form's use of counter display units only 5½ in. wide that hold three dozen packages. Designed to take a minimum of counter space, they can be linked together side by side if desired. These compact wire racks helped get bras unto departments that had never before handled them and promoted logical tie-in sales.

For the Easter season, Exquisite Form regularly stages a promotion based on women's need for coordinating brassieres with blouses. But blouses and bras are sold in separate departments—frequently on different floors. Placing the new display unit on the blouse-department counter near the cash register sold hundreds of dozens of bras. In notions departments, brassiere display units have been teamed up with Rit home dyes, suggested for tinting a bra to match the rest of each ensemble.

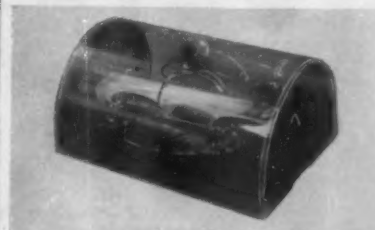
Brassiere packaging success apparently is convincing more department stores daily of the value of packaging to gain extra sales by coordinating different departments.

Profit histories are driving the lesson home: A big-city department store, The Hecht Co., Washington, D. C., initially ordered bras in the ratio of 35% packaged, 65% loose. Three months later, this store switched to 100% packaged merchandise and experienced sales increases of more than 40%. A small-city department store, Kirven's, Columbus, Ga., reported that volume has tripled since packaged merchandise was introduced five months ago, in comparison with the same period last year. And at Goldsmith Department Stores, Cincinnati, Ohio, sales have gone up from 30 doz. to 120 doz. every four weeks—a 400% increase attributed to packaging.

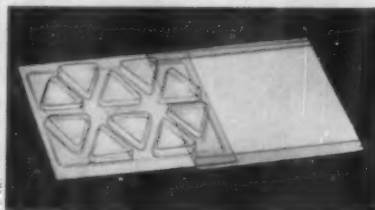
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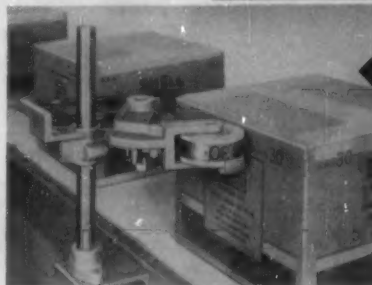
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Four New Ways to Code-Mark Packages

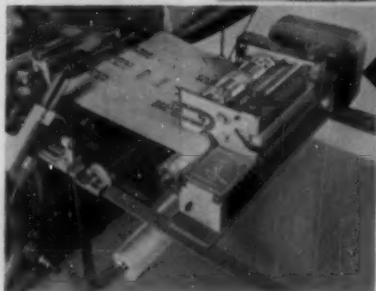
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Side-Coder . . . imprints side surfaces of folding cartons, set-up boxes, rectangular cans and canisters. Can be used to imprint codes, product identification, etc. simultaneously. Fully automatic, adapts to any mechanized production-line.

Bottom-Coder . . . portable, space-saving unit that imprints codes on bottom of jars, bottles, cans, etc. Imprint surface may be flat or concave, flush or recessed. Wheels right up to the line, can be moved about at will.



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Package-Top Labeler

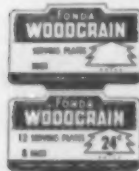
Labels 40 to 80 packages a minute

This new machine has many uses in the food and other fields as a separate unit with a wrapping machine not equipped with a labeler. Heat-seals a diecut label (from a roll) to top of cardboard container or package having a firm surface. Automatic label imprinter available. Get the facts.

Label Imprinter Cutter-Stacker

Reduces inventory costs, eliminates waste, uses labels of smart design

Supplies loose, cut, stacked, diecut heat-seal labels for hand application. Imprints and stacks 140 labels a minute. Unit stops after predetermined number of labels is cut. Imprints label of standard design for immediate use.



A "blank" roll-type label is imprinted with title and other information. Imprint items can be changed in a few seconds.

Oliver labels and labeling equipment offer many money-saving ideas. Write for details.



OLIVER MACHINERY COMPANY
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sell your customers



keep them sold
assure repeat business with

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- Available in Clear, Opaque, in bright colors
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Write for samples, catalog and prices.

LERMER PLASTICS, INC.

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REPRESENTATIVES IN THESE CITIES: Rochester, Memphis, Miami, Cincinnati, Columbus, Cleveland, Chicago, Detroit, Minneapolis, San Francisco, Los Angeles, Toronto, Philadelphia.



PIONEERS AND SPECIALISTS IN PLASTIC CONTAINERS

Gas packaging

[Continued from page 136]

materials in roll stock. As line speed increases, nitrogen consumption goes up only slightly. Thus, pouches made at 48 a minute use about the same total nitrogen required to produce 32 a minute. Nitrogen costs about one-fifth of a cent per pouch.

► All packages have been kept well within Schreiber's limit of 0.4% maximum oxygen content.

► Labor costs of the packaging line have dropped about 20%. The semi-automatic line necessitated three girls to hand fill pre-formed bags, plus a checker and an operator to hand place filled bags on the vacuumizing and gas-flushing equipment. The new line requires only two girls to supply the automatic in-feed conveyor, plus a machine operator and checker.

► Human errors due to hand loading are eliminated, cutting down on waste.

► Packages are automatically code dated, formerly a separate operation.

Schreiber feels that gas pouches offer no significant difference in preservation qualities over vacuum bags and only a slight advantage in the tendency of slices to stick to each other when the packages are first opened. However, it prefers the gas pack over the vacuum bag for other reasons, especially with its new automatic line in operation:

► Film holds up better in a gas package, since the nitrogen-filled pouch relieves a strain on the materials. A vacuum bag is more liable to fracture, the company says.

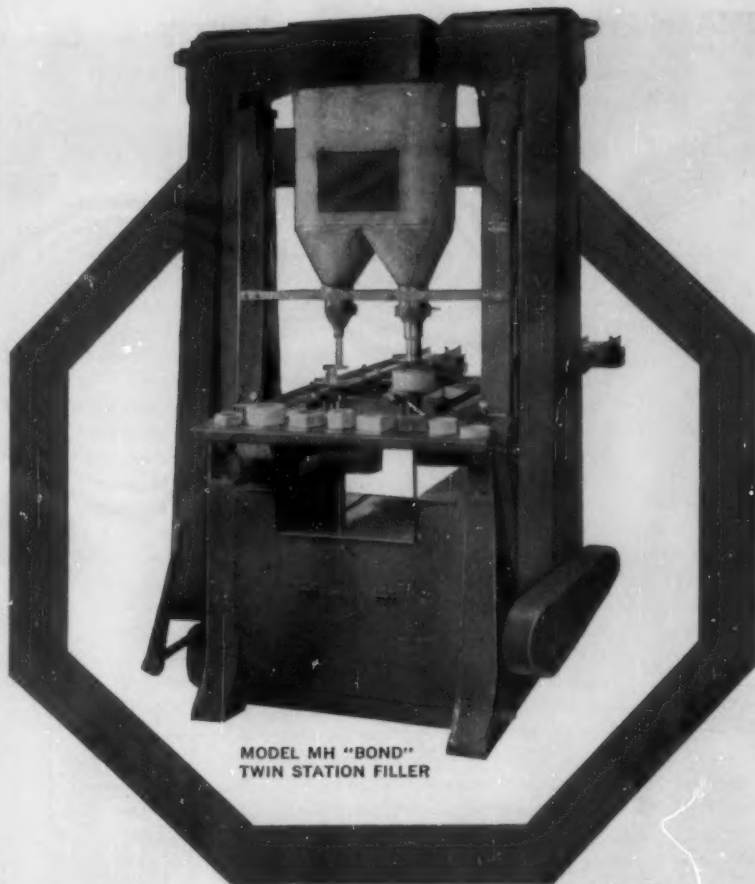
► Residual oxygen content can be checked immediately in a gas pack,* while it is necessary to wait weeks to do this properly in a vacuum bag.

► A gas pouch looks better and avoids the wrinkles and sharp edges of a vacuum bag. Gas pouches do not have the hard, board-like feel of vacuum bags.

► The cheese arrives in better shape at the consumer's home. In a vacuum bag, cheese constantly is being squeezed by an atmospheric pressure of about 14.7 lbs. per sq. in. (or greater) and edges of the slices tend to become "feathered."

With interest in gas packages on the upswing, the Green Bay experiment may prove to be a pacemaker.

* See "Simplified Micro-Gas Analysis," this issue, p. 151.



MODEL MH "BOND"
TWIN STATION FILLER

Products and Containers Unlimited!

Drugs, chemicals, insecticides, cosmetics, spices, food products . . . fine powders, granules, grains . . . sticky powders or free-flowing materials . . . may be volume filled, gross weighed or packed — on the one machine — into almost any type or size of container, in weights from a few grams up to 10 lbs. or more. Running speeds up to 50 per minute with one operator. Other models available, semi-automatic and fully automatic. Write **US** for complete information.



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CSMA mid-year meeting and aerosol survey

Reports on problems in labeling chemical products and on progress in aerosols held interest for packagers at the 43rd mid-year meeting of the Chemical Specialties Mfrs. Assn., Inc., held recently at the Drake Hotel, Chicago.

The CSMA's sixth annual Aerosol Products Survey showed that the 11-year-old aerosol industry had passed its billionth package mark late in 1956. Its record-breaking production of an estimated 320 million units of household and industrial aerosol products was a soaring 33% ahead of the previous high mark set in 1955 of 240 million. Pressurized food products are not included in the CSMA survey.

For the first time, insecticides were not in the top position, being displaced by hair lacquer which had a booming 50% increase over the previous year and totaled 79,640,927 units for 1956. Pressurized personal products, including hair lacquers, now account for half the total aerosol production.

Insecticides totaled slightly more than 52 million units, leveling off at about the 1955 figure. In third place was aerosol shaving lathers at 42 million which, for the first time in three years, failed to show an increase. In fourth spot was room deodorants at more than 35 million units.

Two categories showed significant increases.

Pigmented and metallic paints and clear plastic sprays increased from

9,247,510 units in 1955 to 22,557,418 in 1956. Miscellaneous household products went up 272%, totaling just over 23 million units. This latter grouping will probably be broken down next year as a result of its growth; the category includes such aerosol products as glass, metal, oven, rug and upholstery cleaners, waxes, insect repellents, shoe dressing and water repellents.

Glass aerosol containers, reported at 15 million units, increased 50%. For the first time, the survey showed that smaller containers—up to 6-oz. capacity—outnumbered 12-oz. containers. In its first year of use the new "16 oz. but over 12 oz." group accounted for 32,776,949 units.

Speaking before the association, U.S. Rep. Thomas B. Curtis (R-Mo.) asked the chemical industry to support passage of a new federal law he is sponsoring that would require uniform labeling to protect the consumer against his own misuse of newer chemical products. He acknowledged that a large portion of the chemical industry has applied precautionary labels and the new bill would not require such companies to alter their labels substantially.

The proposed law would help doctors treat cases of accidental poisoning from some household chemicals whose composition is not identified on the label.

The legislation, Rep. Curtis said, would cover all such products sold in interstate commerce.

FPBAA carton equipment guide

[Continued from page 140]

commercially available equipment for handling different types of carton operations. Basic machine statistics are all collected into a single, easy-to-use reference book. The equipment illustrations appearing on each data sheet give the specialist information which might be of only academic interest to non-specialists. Carton-feeding mechanisms, compression units and other structural features are clearly apparent in these photographs and drawings.

Perhaps the greatest single use of this manual lies in the orientation

of personnel unfamiliar with carton problems. The correlations between the individual carton structural styles and the machines handling them are particularly valuable in this respect. The remaining background information also serves as an educational point of departure for further specialized studies or as part of the basic knowledge of carton problems necessary to anyone concerned with the art.

Copies of the Mechanical Carton Equipment Manual are available through members of the Folding Paper Box Assn. at \$25 each.

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YOUR
sealing
picture?



Amazingly adaptable — this DAREX "Flowed-in" GASKET!

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The gasket is actually "flowed" in place by automatic Dewey and Almy machines, spinning out parts with production-line efficiency. Depending on the formulation, the sealing compound will *seal* in gases, liquids, microscopic particles . . . or *seal out* moisture, as it does on the Kodak canister.

More than 50 BILLION containers of all kinds were sealed by the DAREX "Flowed-in" PROCESS last year alone. Many new applications are on the drawing boards now. Each will be supplied as a complete "package": the sealing compound, the equipment, the technical service . . . to help industry *deliver* better products.



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BRACON squeeze-cans are pliable polyethylene cylinders with metal tops and bottoms . . . permanent multi-color printing. They're stackable . . . often they're refillable. Always lightweight . . . non-breakable and completely functional.

For example, these garden dust containers work equally well when aimed up or down. Simply squeeze . . . *WHOO!*, a cloud of dust envelopes leaves and petals. Other squeeze-cans are designed for controlled dispensing of syrups, sauces, liquid detergents, tire cleaners, air fresheners, etc.

Over 400 food, drug, cosmetic and household products are being packed in BRACON plastic tubes, bottles and cans.

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BRADLEY CONTAINER CORPORATION

A SUBSIDIARY OF AMERICAN CAN COMPANY

Maynard, Mass. — New York, Chicago, Los Angeles, Toronto

Lined poly bottles

[Continued from page 150]

calamine lotion. Here, lining "B" did not significantly reduce weight loss, but was very effective in that it eliminated greasiness, product odor and a "crusty" deposit on the bottle surface.

Although lining "B" is used in the above three examples to solve successfully three different problems, it is not to be concluded that it is universal in its application.

Experience shows that it is essential that the liner be thoroughly tested. To do this, certain tests have been developed and are used as a constant check during production runs.

Among other techniques, an AQL sampling permeability test is employed for measurement as to the presence and efficiency of liners. In one such typical test, sample bottles and unlined controls are filled to shoulder level with carbon tetrachloride, capped, weighed and then exposed, both upright and inverted, to 120 deg. F. conditioning in a circulating air oven. For one of the several liners, an arbitrary weight-loss maximum of 7% in the lined bottles, in comparison with the identical unlined controls, is used. As a matter of record, the weight loss characteristically runs 1 to 2% of the controls. This and similar tests are routinely used to assure lining quality.

For some time there was difficulty in demonstrating the presence of a liner by visual means. One of the techniques developed involves the use of "unmolded" sections of lined polyethylene bottles. This consists of immersing the polyethylene section, with its lining, in ethylene glycol at 280 deg. F. for five minutes. The polyethylene has a "memory" and shrinks considerably, but the liner does not shrink. Further, the liner has less stretch than the polyethylene and the liner therefore breaks into a pattern of characteristic wrinkles as the supporting polyethylene unmolds. A technician skilled in the art can classify the type of lining by use of this technique.

Figure 1 shows an "X" type lining after the unmolding technique. In Figure 2, this technique is altered and cross sections of an opaque, unmolded, lined bottle reveal the

presence of a "Y" type of liner before and after unmolding. Figure 3 shows a "Z" type liner in both cross section and top views.

In addition to these tests on the lined bottle, each product should be tested for product packageability. As a standard operating procedure, all new products are subjected to testing similar to that reported in Table I. In fact, the data in this table are taken, for the most part, from tests conducted for customers. At the conclusion of these tests, the best liner is recommended for customer evaluation. However, the final decision on packageability rests with the customer.

Internal bottle wall-surface treatment is required for proper adhesion of the lining material. This treatment is different from the typical treatment used on the exterior of polyethylene bottle or film surfaces to obtain proper ink and label adherence.

At present, 18-mm.-finish bottles are the smallest being lined commercially. In some instances a slight reduction in capacity, never more than a few cc., is encountered during the lining operation. This should be considered where the bottle is critical as to air space. Bottles from 1- to 16-oz. capacity are commonly lined.

Stock shapes, including Boston round, taper, oval, cylinder and oblong, all have been lined, as have

a number of custom-design shapes.

At present, products commercially packaged in lined bottles include drug topical lotions, several hair products, an electrical flux material, a series of paint colorants, an after-shaving lotion, a cologne and a shampoo.

The successful development of flexible bottle liners marks a major step forward for a package which, in its brief history, has been notable for its technical advances.

The continued expansion of new types of liners will allow an even greater variety of products to be efficiently packaged. As techniques are improved, linings should be applied to larger- and smaller-capacity bottles than is now possible and limitations on shape will be reduced.

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3. "Investigation of the Shelf Life of Liquids in Polyethylene Bottles," Wright Air Development Center WADC Technical Report 53-133, Part I, Contract No. AF33(616)-112.
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Must meat stay anonymous?

[Continued from page 95]

or skin-tight bag in combination with a carton. This helps to retard or prevent mold growth. The same effect could possibly be achieved with a gas package. Nitrogen is not considered acceptable for meats, but perhaps some other inert gas would be. Refrigeration would probably be required. But the important fact is that in tests so far, gas packaging has not significantly extended the shelf life of meats.

Freeze-dehydration? Dehydration is one of man's oldest preservative methods and the freeze-dehydration process offers excellent long-range meat storage at normal temperatures for military use. This process, already being used in the pharmaceutical industry, eliminates drawbacks of usual "hot" dehydration methods

by first freezing the meat and then vaporizing the ice in a vacuum chamber. Water passes directly from a solid state to a vapor, removing 70% of meat's weight yet leaving it porous and in its original shape for easy reconstitution with water. By reducing moisture content to 2% or less, nearly all harmful bacterial, enzymatic, chemical and other changes are prevented. The process is expensive at present and product color change can occur. Packaging requires an excellent moisture and oxygen barrier; cans have been the best answer to date.

Antibiotic treatment? It has been accepted by the Department of Agriculture for poultry, but not for fresh red meats. Reason for this is that some meats are eaten raw or

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RE-USABLE PLASTIC CONTAINER. Illustrated folder describes re-usable polyethylene jar with snap-seal cover available in pint, 1½ pt., quart sizes, transparent or in colors. Burlington Molding Corporation. (G-751)

FLOCK CATALOG. 22-page catalog describes uses of flock for decorating and coating. Contains samples of flock-coated paper in several colors. Claremont Waste Manufacturing Co. (G-752)

LINED PAPER BAGS. 8-page booklet describes use of Pliofilm-lined kraft paper bags for the packaging of pre-ground coffee. Lists results of survey of consumer reaction to these bags. Goodyear Tire and Rubber Company, Inc. (G-753)

PAPER TUBES. Illustrated folder describes company's paper tube containers in various sizes with metal, plastic, and paper closures for packaging dry, flowable products. Also shows "goose-neck" containers for products such as pencils, small tools. Niemand Brothers, Inc. (G-754)

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ROTARY LETTERPRESS. Illustrated folder describes rotary rubber plate letterpress that prints up to 6 colors. Available in models for any web sizes from 20 to 60 inches. Paper Converting Machine Co. (G-765)

INTERIOR PACKAGING MATERIAL. 12-page booklet discusses "Kimpak" cushioning material, including charts indicating performance characteristics. Also discusses use for surface protection. Kimberly Clark Corp. (G-766)

NON-DRIP CONTAINER. Booklet illustrates applications for cone top metal can equipped with non-drip nozzle for ease in pouring liquids, available in 12, 16, 22, 32 oz. sizes. American Can Company. (G-767)

LABEL FOR FILM. Folder describes label that can be transferred to transparent packaging material by heat and pressure and gives appearance of printed film. Also describes machine specifically designed to apply label. Dennison Manufacturing Co. (G-768)

rare. High temperatures of a thorough cooking process are needed to disperse an antibiotic treatment and to eliminate any possible residual effects. An antibiotic process is not out of the question, but none has been found as yet suitable for red meats. An acceptable treatment would probably extend shelf life long enough for the packer to slaughter, dress and portion cuts for branded sizes.

Few people in the industry are willing to predict where packaging of fresh cut meats will go from here. Nearly everyone is watching and waiting for someone else to make a move. Chances are that it will be one of the smaller and more daring packers who finally makes the move to drop 19th century practices and join the automated, packaging-minded brethren of other food industries. At that point packers will become packagers.

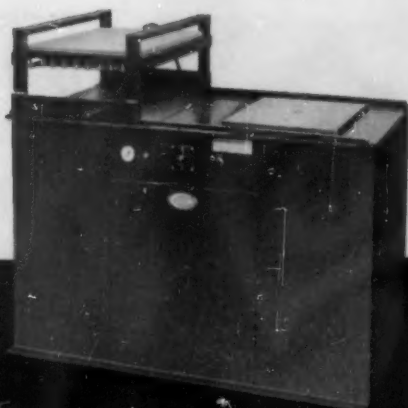
Adopted ideas

[Continued from page 97]

potential products which could become a part of the line, it was wise to adopt the most immediately recognizable format through brand name, color and design. Association in the minds of consumers of the quality product name "Prestone" was held to be a natural guarantee mark in the automotive field.

In order to distinguish the car beauty products from the cooling-system products and still retain the basic elements of the family design, the designer has reversed the fireman red and diagonal stripe panels and used blue lettering on a white oval background for the name panel rather than white lettering on a blue rectangle. Again, the product names—"Car Polish," "Car Wax" and "Car Wash"—get the focus of attention to assure a family product group which is identifiable with, but not to be confused with, the cooling-system items. As in the case of the latter group, "surface" in terms of results (high sheen, polished, reflective, protected) was the underlying theme. Use of tinplate itself as an element in the label design is again the "natural" in packaging materials to express the desired effect.

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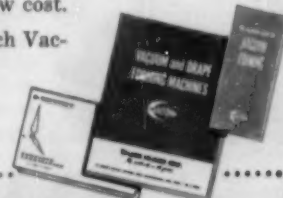
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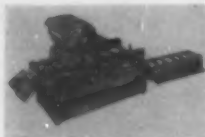
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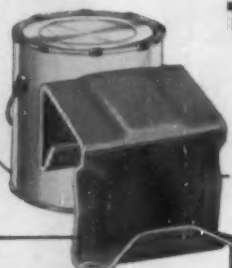
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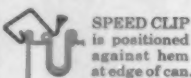
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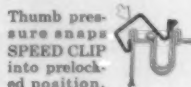
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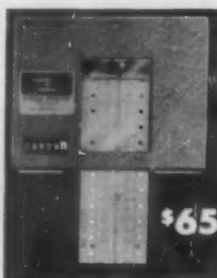
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Mfrs. of: Heat-Timer Electronic Controls, Heat Recorder-Totalizer, Valve, Valve, Thermocouple, Main Line Quick-Valve, Motorized Valves, Smoke-Eye Smoke Alarm, Fire-Chief Fire Alarm, R-T Burner Alarm.





CLEVELAND CONTAINER DUST GUNS

This metal-end telescope container is a complete self-contained unit . . . needing only a perforation in the top to be ready for use.

SALES APPEAL and UTILITY are combined in this practical dispenser of dusting or spraying insecticides for gardens, flowers, plants, fruit trees and shrubs.

Our WEED KILLER package, designed for use from a standing position, is ideal for dispensing chemicals for weed and crabgrass control.

Containers for
refills available
in all sizes.



Why pay more? For quality products
... call CLEVELAND!

Write the nearest
CLEVELAND CON-
TAINER plant for fur-
ther information.



PLANTS
AND
SALES OFFICES:
CLEVELAND
DETROIT
CHICAGO
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PLYMOUTH, WIS.
JAMESBURG, N. J.
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ABRASIVE
DIVISION
CLEVELAND

THE
CLEVELAND CONTAINER
COMPANY •

6201 BARBERTON AVE., CLEVELAND 2, OHIO

• ALL-FIBRE CANS • COMBINATION METAL
AND PAPER CANS • SPIRALLY WOUND
TUBES AND CORES FOR ALL PURPOSES

CLEVELAND CONTAINER CANADA, LTD.

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SALES OFFICES:
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WASHINGTON, D. C.
ROCHESTER, N. Y.
WEST HARTFORD,
CONN.





MARKED IMPROVEMENTS in IDENTIFICATION AND DECORATION

Markem's original foothold... in business was really just that: making marking machines for the shoe industry. Since then (1911), the shoe field, and nearly every other industry, has been using the Markem Method more and more. Where Markem was "in at the beginning", you'd expect to see a lot of Markem in the shoe business, and you do. Our 32A's imprint payroll coupon tags; jobs for the 1000, 24 or 79AB, and 105-10 or 45AC include quarter lining, match marking, heel pad and sock lining embossing. Currently, a brand new match marking machine is being field tested, along with some special marking compounds for "hairy" hide. Our "special" field, that began at the foot of the ladder, now reaches from one end of industry to the other.

Nothing succeeds like... successful use of Markem machines, it seems, especially with one of our electronics customers. Since 1952, they've bought 42 Markem machines of five different types: 20A's for cylindrical objects; a 25A for marking boxes, tape, etc.; half a dozen high production PLBR's for cylindrical objects; 45AC's for irregular shapes; and more than two dozen 45A's. Latest use of a 45A is imprinting a new type of condenser having right angle wire leads. This customer isn't really typical—but, like all our others, he does know the value of the right marking method for a given job.

13-9-12—Markem! Markem Machines are used throughout "industry", but the things "industry" marks often end up in the corner store, gas station and gift counter. For example, you may not associate "industry" with "sporting goods", but several sporting goods manufacturers use the Markem Method. For example, one company had been sewing two separate fabric labels on football players' hip and kidney pads (we sent in a substitute illustration you'd recognize). Now, trademark, size, etc. is imprinted directly on the outside of the curved fibre pads, with a 45A, effectively blocking label inventory problems and sewing costs. Maybe your "industry" has some unsolved marking problems. If so, we'd like to tackle them.



A letter, call or TWX could bring the marking help you need—or can use. The address is Markem Machine Co., Keene 1, New Hampshire.

MARKEM

Automatic dispenser for six-can beer packs

A new beer rack for automatic dispensing of six-can packs more than doubled canned-beer sales in two test supermarkets in a month-long

New Haven, Conn., a similar store using conventional display methods sold only \$1454 worth of beer during the same period of time. A Long



survey conducted by Container Corp. of America, Chicago.

The automatic dispenser, made of lightweight steel, is stair-step shaped. It is six horizontal tiers high and 16 vertical rows wide. A ledge along each tier holds price tags. Each tier, the width of a six-pack, slants from back to front. As the shopper takes out a carton, a new one slides into place. It handles six-packs of all manufacturers and can be built to fit the store's space.

In a four-supermarket study, sales from two stores using the new rack far outstripped volume in two similar stores using standard beer displays, it is reported. A large Westchester County, N. Y., store sold \$4382 worth of canned beer, while in

Island, N. Y., store using the dispenser moved \$2238 worth of canned beer, while a similar Long Island store without the rack had sales of only \$1652 for a like period.

According to Robert M. Bennett, Container Corp.'s manager of brewery and beverage packaging, the test was undertaken "as a suggested remedy for the consistently poor beer merchandising that now exists." It was found, after a two-year survey, that most retailers "don't seem to understand how to merchandise beer" and the company recommends selling aids such as the dispenser rack to increase sales.

Credit: "Dispensomatic" beer rack by North American Equipment Co., Paterson, N. J.

Package design research conference

The role of research and testing in package design was discussed for and by 243 registered representatives of firms which design, supply, promote or use packages at a Package Research Conference held recently in New York.

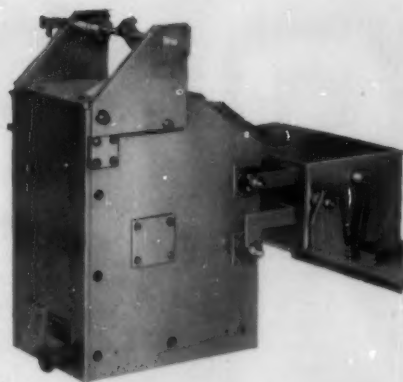
The announced purpose of the two-day conference was to explore the ideas, methods and facilities for research in package design, to evaluate their potentialities and limitations, to coordinate available information on the subject and to suggest how it can be put to work.

Manufacturers of packaged goods

were said to compose the largest segment of the firms represented—about 41%. About 25% were advertising and research agencies, 13% manufacturers of packaging materials and containers, 11% producers of basic materials, 6% miscellaneous manufacturers and 4% package designers.

Speakers ranged from such familiar figures in motivational research as Louis Cheskin, director of the Color Research Institute, and Dr. Ernest Dichter, president of the Institute for Motivational Research, to Vance Packard, author of "The

There's a
BETTER NET
for you, too—



IN THIS MAGIC BOX

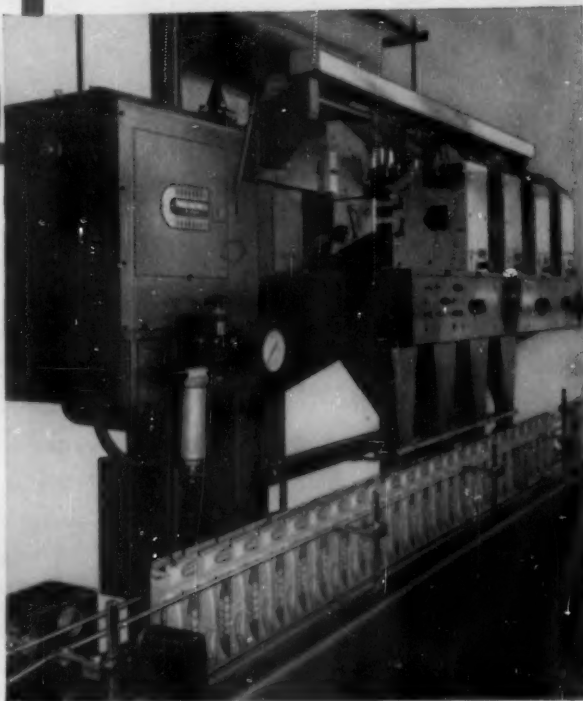


PRODUCT net weight, we mean—a highly important factor to America's volume producers of packaged goods... because it can, and does, have a direct bearing on net profits.

PNEUMATRON provides net weighing accuracy never before available... using a new instantaneous pressure principle. The Pneumatron "head" contains a highly responsive cantilever assembly which moves only a few thousandths of an inch during the weighing operation—eliminating wear and friction. An extremely sensitive control device—an air jet—instantly detects and measures the position of the weighing assembly—keeps package contents within tolerances which are remarkably close.

That's PNEUMATRON, in brief. Now setting new standards of dependability and economy in the packaging of the products pictured above, it is the culmination of Pneumatic's years of specialization in the engineering and building of automatic packaging equipment. Such advanced design is characteristic of all Pneumatic equipment for bottling or packaging.

PNEUMATIC SCALE CORP., LTD., 82 Newport Avenue, Quincy 71, Massachusetts. Also: New York; Chicago; Dallas; San Francisco; Los Angeles; Seattle; Leeds, England. Canadian Division: Delamere & Williams Company, Ltd., Toronto.



Packaging and Bottling Equipment

RESiNA

CAPPERS

a model for every purpose... a speed for every need!

NEW! INNERSEALER



RESiNA

Automatic innerseal machine for selecting and applying standard innerseals to various types and sizes of tin cans as commonly used in the oil industry.

Capacity: 60-120 per minute.
Seals from $\frac{7}{8}$ " to $1\frac{1}{2}$ ".

AND SPECIAL MACHINERY

Agents in principal cities throughout the United States and Canada.

Write for descriptive literature

RESiNA

AUTOMATIC MACHINERY CO., INC.

Brooklyn 31, New York

Hidden Persuaders." Others included Dr. H. A. Witkin, associate professor and director of the Psychology Laboratory, College of Medicine, State University of New York; Dr. James G. Miller, director, Mental Health Research Institute, University of Michigan; Barbara Kaye, McCann-Erickson, Inc.; Dr. Arthur H. Wilkins, Dancer-Fitzgerald-Sample, Inc.; Robert E. Elrick, Elrick & Lavidge, Inc.; Arno H. Johnson, J. Walter Thompson Co., and Dr. Myron J. Helfgott, research consultant.

Participating in panel discussions were Albert Kner, director of the Design Laboratories of Container Corp. of America; Cornelius Du Bois of Foote, Cone & Belding, Inc.; Dr. Kermit Schooler of Alfred Politz Research, Inc.; Dr. Thomas E. Coffin, National Broadcasting Co.; A. W. Harding, General Mills, Inc.; Jennifer Macleod of Ogilvy, Benson & Mather, Inc.; Dr. Herbert Fisher of J. Walter Thompson Co., and William Herzog of S. C. Johnson & Son, Inc.

Dr. Witkin was awarded the "Package Research '57 Award" for outstanding achievement in original research related to packaging.

Sponsors of the conference and award were Lippincott & Margulies, Inc., of New York, industrial design organization.

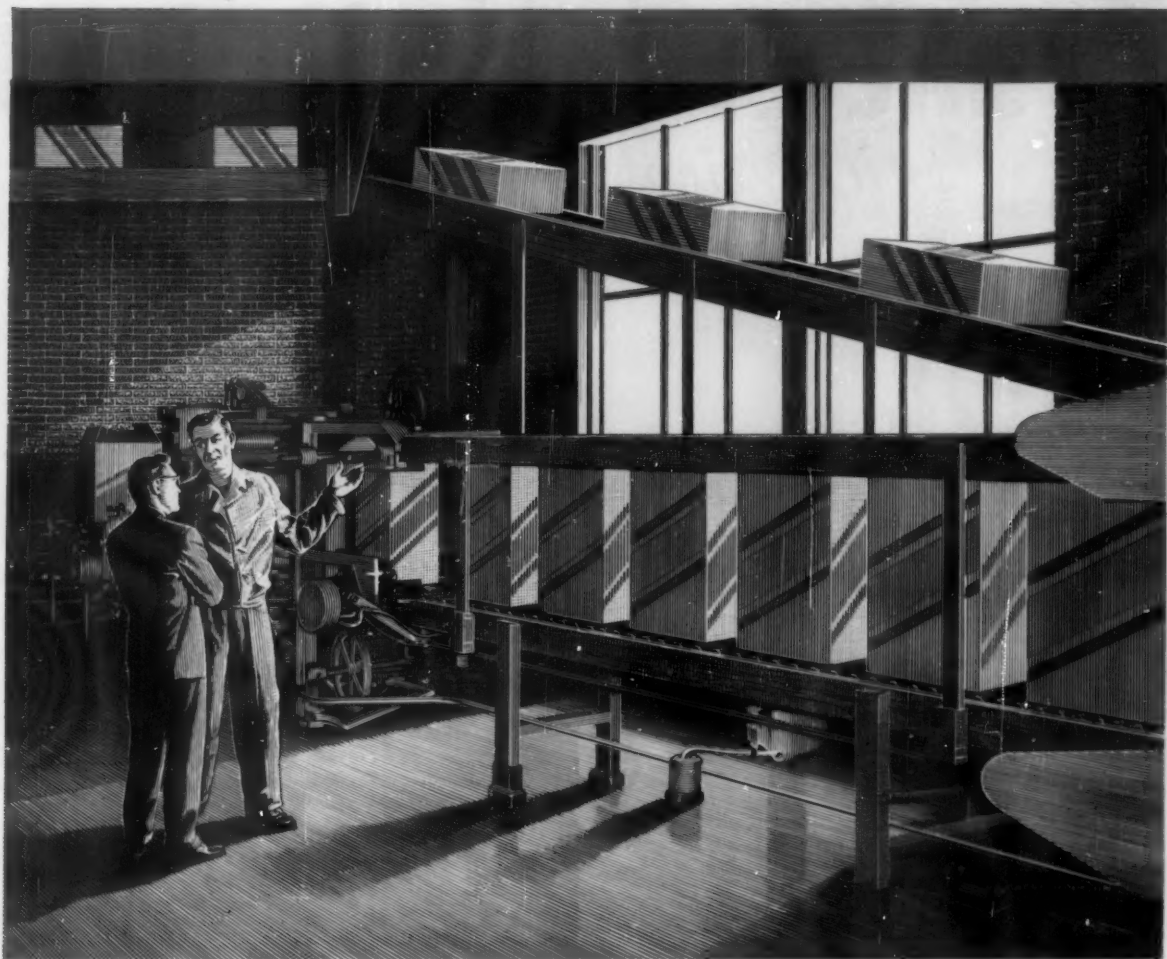
Round-the-world test

The effectiveness of self-adhering tapes for export packaging was demonstrated in a test recently completed by the Pressure Sensitive Tape Council which involved shipping around the world five packages which were sealed with pressure-sensitive tape.

Selected for the test were a color TV picture tube, a case of soap, a case of cigarettes, a case of abrasive disks and an assortment of drug products.

Packages, which left New York March 15 and returned June 3, were unloaded and inspected at eight cities along their route through the cooperation of American International Underwriters, an international insurance firm.

Official and independent marine insurance surveyors' reports verified that the tapes, containers and contents sustained no impairing damages during the air and sea voyage.



PACKAGING PLANNED FOR AUTOMATION



A single "off-size" box can halt your automated production line. Stay in the clear with Gaylord boxes. Precision-made of quality materials—they're your best choice for smooth, uninterrupted package flow.

Whether your operations are fully or semi-automated, Gaylord boxes help keep you profitably on the move. Contact your nearby Gaylord packaging engineer.

CORRUGATED AND SOLID FIBRE BOXES • FOLDING CARTONS • KRAFT PAPER AND SPECIALTIES • KRAFT BAGS AND SACKS

GAYLORD CONTAINER CORPORATION ★ ST. LOUIS

DIVISION OF CROWN ZELLERBACH CORPORATION

Shuford's SHURTAPE®

*Sticks tight...
Strips easy!*



First prize package
in paper products!
Folding Paper Box
Assn. Competition.

***This pressure-sensitive paper tape
serves many packaging needs
... and saves you money!***

Versatile Shuford's SHURTAPE type CP-10, rubber impregnated crepe paper backing, is a tape particularly adaptable for packaging purposes.

Features high tack and adhesion qualities, flexibility, good tensile strength and easy stripping. Comes easy off the roll!

Economical-to-use Shuford's SHURTAPE is recommended for sealing cans, tubes, bags or bottles of tin, fiber or glass ... also for most low-cost packaging or closure of kraft, board or film.

Whatever your packaging problem ... if a paper tape can be used ... there's a Shuford's SHURTAPE to meet your needs!

Write for complete information

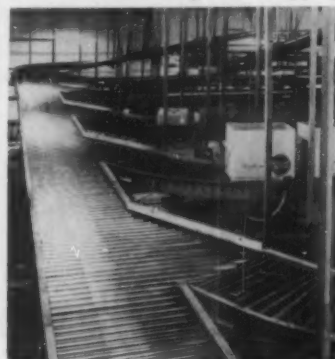
CLOTHES LINES • TWINES
PRESSURE-SENSITIVE PAPER TAPES
SASH CORDS • WEATHER STRIPPING
COTTON & RAYON YARNS • EXTRUDED PLASTICS



World's Largest Manufacturer of Cotton Cordage

Carton handler

A giant new electronic-controlled conveyor system capable of distributing up to 180,000 cartons per day links manufacturing and shipping



operations at the Millville, N.J., glass-container plant of Armstrong Cork Co.

Conceived by the company's engineers to improve inspection and packing efficiency, the new system is made up of more than 200 conveyors, almost three miles in total length.

The system can handle 470 different-sized shipping cartons for glass containers used to package foods, pharmaceuticals, beverages, toiletries, household and industrial supplies, as well as for other glass items made at the plant. Cartons of 27 different sizes can move along the system at one time.

When the carton supply at an inspection and packing station gets low, a demand is registered electronically in centrally located carton assembling and dispatching areas.

By pressing the appropriate button, a 65-ft. long "train" of cartons is dispatched to the station on a network of belt, live roller and gravity conveyors. These are controlled by photo-electric cells to insure steady flow. Packed cartons weighing up to 65 lbs. travel in 35-ft.-long trains to shipping or storage points.

The conveyors are mounted overhead to permit storage and fork-truck handling of cartons in floor space thus saved.

CORRECTION: Gibraltar Corrugated Paper Co.'s trade name for the single-weight flexible corrugated sheet used in the Rheingold wall-panel display illustrated on p. 137 of the June issue is "Corro-Trim," not "Corrobuff" as stated.

Sealed sutures

The hermetic seal and easy access provided by a new type of package for surgical sutures suggests further applications for medical and other



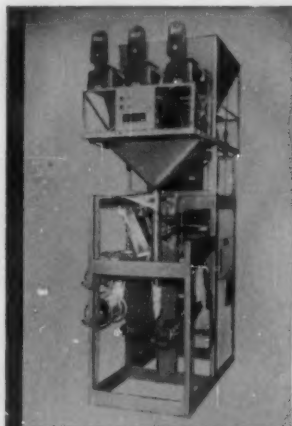
products that must be kept sterile yet handy for quick use. A heat-sealable lamination of aluminum foil, paper and plastic film forms the new envelope package for catgut sutures produced by Bauer & Black, Div. of The Kendall Co., Chicago. It was designed to eliminate hazards of broken glass in the operating room as well as the expense of glass tubes conventionally used to package sutures. The foil is said to serve as an effective barrier to formaldehyde and most chemicals commonly used as sporocidal solutions in hospitals and the heat-sealable film provides a hermetic seal. Forming an absolute barrier to bacteria and spores, air and moisture, the package keeps the suture sterile and moist until opened.

Three dozen of these suture packets, submerged in a formaldehyde sterilizing mixture, are supplied in a glass jar. Packets are lifted out with sterile forceps and transferred to a tray for use in the operating room. Cut along the edge with surgical scissors, the packet opens to yield a small reel of suture.

The new package takes less storage space than glass tubes, provides quick and easy identification, is convenient to transport from storage jar to suture tray and is not subject to breakage or rolling.

Credit: Foil-paper-plastic film laminate by Shellmar-Betner Div., Continental Can Co., Inc., Madison St., Mt. Vernon, Ohio.

CORRECTION: Round nested paper containers used by Reymor & Bros., Inc., for packaging candy (see MODERN PACKAGING, May, 1957, p. 131) are supplied by both Dixie Cup Co., Easton, Pa., and Sealright Co., Inc., Fulton, N. Y. The one illustrated in the May issue is supplied by Sealright.



3 Machines in ONE! VERTI-PAK

forms . fills . . . seals . . bags

AT LOWEST COST!

The lowest priced 3-in-1 packaging machine by far—pays for itself in 1 year or less! Easy to set up, simple to operate, Verti-Pak reduces handling costs, eliminates waste, speeds packaging. Now in use in many leading plants, VERTI-PAK is a profitable investment for the small, as well as large plant!

30 to 50 COMPLETE PACKAGES PER MINUTE!



CAN BE USED WITH
POLYETHYLENE or with
CELLOPHANE AND POLY-CEL

Verti-Pak is available with auger, volumetric, turret, conveyor and piston feeds and with exact weight scales for packaging almost any product—food products, candy, nuts, dry goods, hardware, toys, plastics, drugs, etc., etc.

Complete Line of Heat Sealing Equipment
Write for Information



MERCURY

HEAT SEALING EQUIPMENT CO.

N. E. COR. HOWARD & HUNTINGDON STS.
PHILADELPHIA 33, PENNSYLVANIA

VERSATILE 4 VALVE FILLER ELGIN "QUAD"

For Liquid and
Viscous Products

Ideal for glass or tin containers, the Elgin "Quad" is the highspeed, accurate producer—easily and quickly adjusted for fill, and speed! The piston stroke which governs fill in all 4 valves is easily controlled by a single micrometer screw adjusting handle. The upper table assembly is quickly adapted to all container heights by a single hand wheel.



You reduce air pockets and foam to an absolute minimum with the Elgin "Quad" bottom fill. The "Quad" is a proven success with light or heavy packs—is easy to clean—and earns its versatile way with trouble-free deliveries.

Write for
complete literature
Address Dept. M77



ELGIN MANUFACTURING COMPANY

200 Brook Street, Elgin, Illinois



THESE PRINTERS...

... whose names appear on this page, and others, have found it to their advantage to work hand in glove with Revere in the production of labels, wraps and packages of which they are proud to say, "That's one of our jobs."

Revere also offers you, whether you are a designer, printer or container manufacturer, the same kind of cooperation in working on your packaging problems. In fact it has been Revere's experience that the close teamwork of all concerned invariably results in a more attractive, more functional package at less cost.

What have you on the fire right now? Let's get together and talk about it.

if it's worth a wrap... wrap it right in Revere Foil

REVERE COPPER AND BRASS INCORPORATED

Executive Offices, 230 Park Ave., N. Y. C. Sales Offices in 33 Principal Cities.

Manufacturers of aluminum foil, plain, colored, embossed, heat seal and other types of specified coatings. Also aluminum foil laminated to tissue, paper, board, film, and a variety of other backing materials.

Classified Advertisements

Employment

Business Opportunities

Used or Resale Equipment

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FOR SALE: One new 40" Flexographic printing unit with Anilox ink cylinder and 8000 watt 48" drying tunnel and blower. Price \$1,950.00. Also—one used one color rotogravure press complete in two color frame, 12" web width. Price \$1500.00. Reply to Helix Machine Company, Inc., 140 East Second St., Mineola, N. Y.

FOR SALE: SURPLUS ROTOGRAVURE STEEL CYLINDER BASES. Complete range circumferences 13 1/4" to 19 1/4" with 28" face. Solid extended shafts. Reply Box 670, Modern Packaging.

FOR SALE: Simplex Cellophane Bag Machines, one each Model #1 and Model #4, complete with electric eye controls, fold over bottoms, one way rollers, suitable for duplex bags. Excellent condition. Reply Box 671, Modern Packaging.

FOR SALE: 1955 CORLEY-MILLER 60" SHEETER GLUER adaptable for semi-automatic wrapping. Cycle speeds up to 20 per minute. Paper cut all sizes up to 60 x 60. Controlled length glue line. 12-foot machine-timed run off table. Available for demonstration in Brooklyn, N. Y. Reply Box 672, Modern Packaging.

FOR SALE: Packaging Machinery. Latest model AMSCO Saddle Label Printing and Sealing Machine, used only 20 hours for sample work—\$1850. 2 each used Doughboy Conveyers 17"x13" 1/4 HP Motor, endless belt—\$300 ea. 3 each used Doughboy Band Sealers for Polyethylene bag sealing—\$500 ea. Miller Wrap Machine for Cellophane Model 5 SIMP—\$250. Reply Box 673, Modern Packaging.

FOR SALE: WORLD'S LARGEST STOCK of wrappers—Rebuilt and guaranteed. At great saving. All types and sizes of wrapping machines now available for immediate delivery. Pneumatic Scale late style Packaging Unit with Automatic Feeder, Bottom Sealer, Filler, Top Sealer and all interconnecting conveyors. For giant size box. Package Machinery Co. FA, FA2, FA3 and FA4 Wrappers with and without Electric Eye. Hayssen adjustable Wrappers—3"-7", 5"-11", 7"-13", 7"-17", 9"-19", 12"-24", 15"-25". With and without Electric Eye. For cellophane or wax paper. Heat seal or glue seal. Hudson Sharp Campbell Models 2W6, 2W8 and 2W10 Cellophane Wrappers. Jones Automatic Carton Forming and Filling Machine. Standard Knapp 429 Automatic Carton Sealer. Tell Us Your Requirements. Write, Wire, Phone Collect. Union Standard Equipment Company, 318-322 Lafayette Street, New York 12, N.Y.

Machinery and Equipment Wanted

WANTED: PLASTIC SCRAP—Acetate, Vinyl, Acrylic, All Other Types. Claude P. Bamberger, Inc. One Mount Vernon Street, Ridgefield Park, N.J. Telephone: HUBbard 9-5330. Not Connected with any other Firm of Similar Name.

Help Wanted

WANTED: MANUFACTURERS REPRESENTATIVES for leading manufacturer of molded plastic boxes. Every industry is a potential customer. Top territories now available. State items now handled, volume of sales and territory desired in first letter. Reply Box 674, Modern Packaging.

WANTED: Poly-Cello Tape Sales representatives wanted for franchise territories. (Consult index for advertisement.) New Rajah Tape attractively packaged, superior quality, sells for less, good commissions. Contacts helpful, selling jobbers, industrial and commercial users. Complete information and samples on request. General Tape Corp., E735 First National Bank Bldg., St Paul 1, Minn.

REGIONAL SALES MANAGER: We need an aggressive, professional regional sales manager headquartered in Chicago for the midwest territory (Chicago to the Rockies, to Texas) for direct sales of flexible packaging products and to supervise six salesmen. Acceptable man must be between 35-45, two years of college preferred, and with a 5-10 year successful record in the midwest selling flexible packaging including films, foils, laminations, coated products. Sales management experience desired but not essential. Salary plus bonus. Submit detailed resume to Box 675, Modern Packaging.

SALESMAN WANTED: Established Polyethylene Designer, Printer and Converter making side weld and conventional bags desires experienced salesman for New Jersey, New York City and New York State. High starting salary plus commission for experienced man with following. Give particulars when replying. Confidences observed. Reply Box 676, Modern Packaging.

PACKAGING SALESMEN: Pacific Coast Converter requires salesmen for Los Angeles, San Francisco and Seattle areas with proven sales record in cellophane, polyethylene, foil, etc. Exceptionally attractive commission arrangement with substantial drawings for qualified men. Replies held in strict confidence. Forward complete details of past experience. Reply Box 678, Modern Packaging.

WANTED: Packaging Engineer with at least 5 years experience with packaging materials and machinery. State education and experience. Reply Box 680, Modern Packaging.

STAKE YOUR CLAIM in the "Foil of the Future" Polyester-Polyurethane Foam. Foremost manufacturer's increased production presents unusual opportunity for profits now—and ever-increasing future profits—to a selected few salesmen and distributors with ability, experience, responsibility and organization to capitalize on its potential.

Polyester-Polyurethane Foam is one of the most versatile materials of the century. It is now selling in volume to manufacturers of luxury packages, die-cut novelties, and for cushioning delicate instruments, etc. Don't miss this rare opportunity. Write, giving full details regarding organization, background, experience, territory, etc. Reply Box 682, Modern Packaging.

WANTED: Packaging Salesman desiring side line flexograph printed boxes, box wraps, etc. Good commission. Eastern territory completely open. All industries served; have just developed new in-line protective coating and printing process, offering unique advantage for food cartons. Reply Box 679, Modern Packaging.

WANTED: Flexible packaging salesman. Experienced in Metropolitan New York City area, minimum 3 years experience. A solid opportunity for a permanent and progressive career with an above-average converter of National repute. Reply Box 681, Modern Packaging.

FLEXOGRAPHIC (ANILINE) INKS. Progressive New York manufacturer specialized all types Flexo inks for paper, films, foils. Expanding sales nationally will consider granting local agency to salesmen well connected with users of Flexo inks. Liberal commissions conducive to building up substantial additional income. Some technical knowledge desirable but not essential. All replies held in strict confidence: C. C. C. POB 3, Corona 68, N. Y.

PACKAGING PERSONNEL: Positions Filled and Secured. A Confidential Nationwide Service for employers seeking personnel and individuals seeking new positions. Inquiries invited. Reply to Graphic Arts Employment Service, East. 1952, Helen M. Winters, Manager; Dept. PAC-7, 307 East 4th Street, Cincinnati 2, Ohio. Phone CHerry 1-2202.

Continued on page 224

COUNT THE "PLUSSES"!

FOR ANY WAX COATED CARTON



OR WRAP



Paraffin + **AC[®] Polyethylene** =

Higher Gloss

- + Greater Hardness
- + Improved Scuff-Resistance
- + Less Flaking and Penetration
- + Higher Blocking and Melting Points
- + Better Grease Resistance
- + Easy Blending
- + Compatibility with All Waxes
- + Ease of Application
with Standard
Coating Equipment

For the whole story on use and blending, write for your free copy of A-C Polyethylene booklet. Just mail the coupon.

SEMET-SOLVAY PETROCHEMICAL DIVISION

Allied Chemical & Dye Corporation
Dept. 520-L, 40 Rector Street
New York 6, New York



Please send me a copy of the A-C POLYETHYLENE booklet.

Name _____ Title _____

Company _____

Address _____

City _____ Zone _____ State _____

Continued from page 222

NATIONAL MANUFACTURER of flexible packaging seeking sales representatives for various areas. Some sales areas already have a sizeable volume of business. Salary will be commensurate with experience and background. Reply Box 690, Modern Packaging.

ESTIMATOR AND SALES CORRESPONDENT with thorough knowledge of figuring cost and selling prices of printed cellophane and polyethylene bags, sheets and rolls. Must be able to correspond with customers and salesmen in the field. Fine permanent position for qualified person. Submit complete history in first letter, i.e., experience, salary, personal information, present employment, reasons for changes, etc. Replies will be held in strict confidence. Reply Box 685, Modern Packaging.

SALES REPRESENTATIVES WANTED: Excellent sales opportunity in Northeastern (2), Midwest and West Coast areas representing well established manufacturer of pharmaceutical, biological and specialty molded rubber goods. Send complete resume c/o P. O. Box 147, Elkton, Maryland. All replies will be held in strict confidence.

WANTED: Flexible Packaging Material Salesmen: Experienced men wanted to handle nationally known line of polyethylene coated papers, films and foils for sales to converters, printers, end-users and contract packers. Exclusive territories open. High commission basis. Write Box 686, Modern Packaging.

ROTOGRAVURE: To take charge of transfer and etching department. Must be able working foreman with complete knowledge carbon printing and transfer problems. Packaging and decorative work. Long established union shop in New Jersey. Good place to live and work. Opportunity to grow with company. Send complete resume and snapshot, if available. Reply Box 687, Modern Packaging.

ENGINEER-EDITOR: Young mechanical/chemical engineer with proven ability to write and interpret developments in packaging can have an interesting future with leading company in this field. Top salary; excellent future. Send samples of published articles. Reply Box 689, Modern Packaging.

Situations Wanted

WANTED: Ohio Salesman—15 years experience in plastic packaging field, over 10 years with one of the largest manufacturers of film, molding powders etc. Interested in plastic packaging materials and related items for Ohio and surrounding territory. Best of references. Reply Box 683, Modern Packaging.

JOB WANTED—ONE OR TWO DAYS PER WEEK ON PERMANENT BASIS. At present technical director multi-plant AAA-1 company division operating in non-ferrous foil rolling, extrusion, coating, laminating. Metals, papers, films, adhesives, inks. Electronics, containers, and structural. Chemical and metallurgical. Classified and commercial. Reply Box 684, Modern Packaging.

WANTED—SITUATION IN CANADA: Have you a plant or are you intending to open one in Canada? I have managerial experience in many fields. Also sole agency for the time being considered. Please reply to Box 688, Modern Packaging.

Miscellaneous

FOLDING BOX FACTORY in Chicago area desired to supply food manufacturer's own needs. Will purchase entire plant. No occupation restrictions on seller. Contact KEGAN and KEGAN, 105 West Monroe Street, Chicago, STate 2-6495.

ALL CLASSIFIED ADVERTISEMENTS PAYABLE IN ADVANCE OF PUBLICATION

NEW RATES: EFFECTIVE MARCH ISSUE

Closing date: 10th of preceding month, e.g., June 10th for July issue.
Per inch (or fraction) \$20.00. Each 3 inches or fraction (boxed) \$10.00 extra.
For purposes of establishing rate, figure approximately 50-55 words per inch.

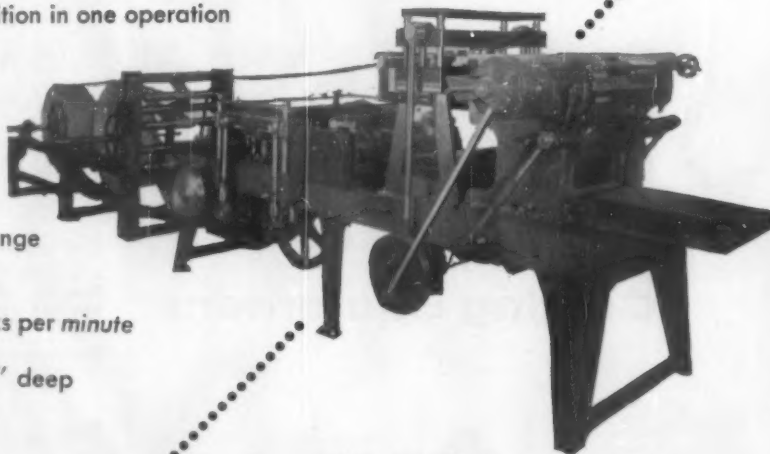
Address all communications to Classified Advertising Department,
Modern Packaging, 575 Madison Avenue, N. Y. 22, N. Y.

Modern Packaging reserves the right to accept, reject or censor classified copy.

Eliminate costly hand-made partitions

Your production costs can be slashed with the Inman automatic adjustable partition machine

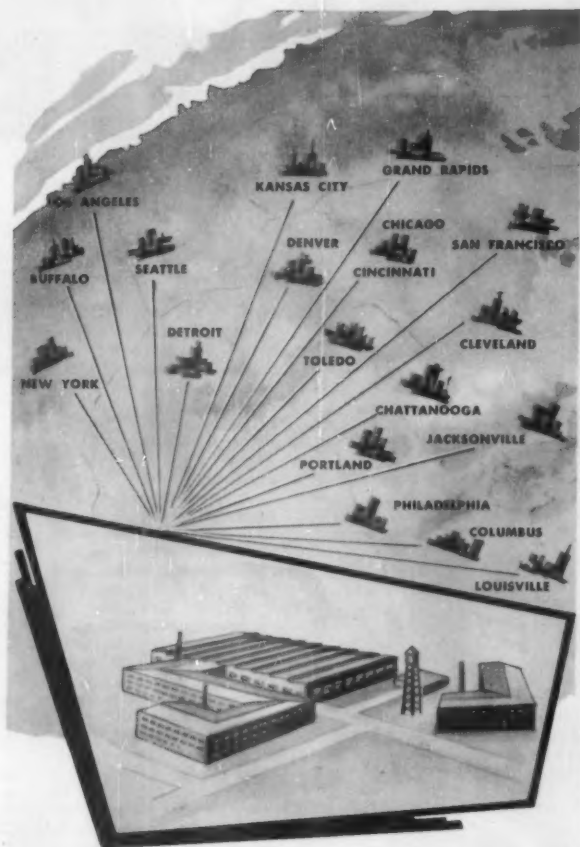
- From roll stock to finished partition in one operation
- Only one operator required
- Clean cut, accurate and uniformly made partitions
- Machine fully equipped and easily adjustable for a wide range of sizes
- Production of 100 or more tucks per minute
- Will handle partitions up to 7" deep
- Production proven



Write for details

INMAN

Manufacturing Co., Inc. AMSTERDAM, N.Y.



KENNEDY *and* SERVICE



are inseparable

Having men in the right place at the right time is one of the ground rules of good customer service. Small wonder then at Kennedy's industry-wide reputation for service, for Kennedy Packaging Engineers are located in most principal cities of the United States—and in Canada.

In every Kennedy field office there are men with expert knowledge of flexible materials and packaging methods... men trained to analyze your problem and recommend its most practical solution. And backing up these engineers is a mile long line of men and machines capable of making anything out of paper, plastics or foil.

Whatever your product, if it involves flexible material packaging... and whatever your problem, be it tricky or routine... a phone call to your nearest Kennedy field office will bring fast, efficient service.

Kennedy
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1

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PLIOFILM
VINYL AND
OTHER PLASTIC**

TYPE

2

**SCRIMBACK
(Cloth or paper)
CELLOPHANE
GLASSINE**

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MECHANICAL DIVISION

New Richmond, Wisconsin

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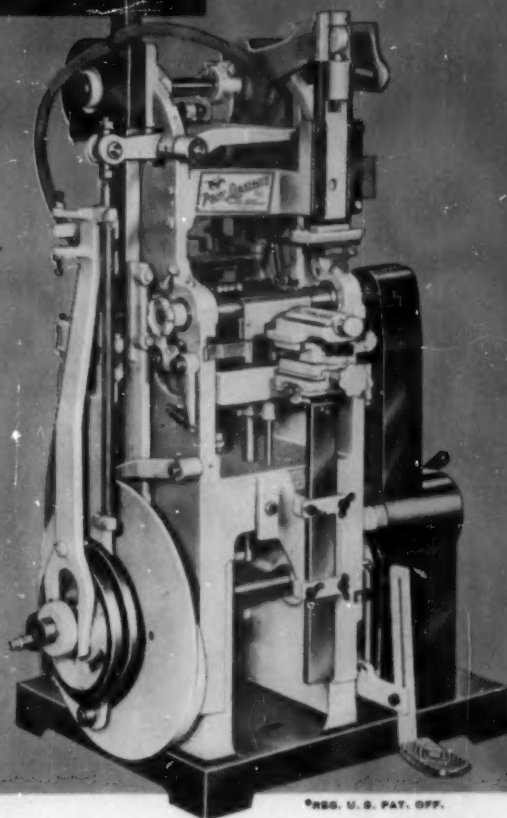
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